

APPENDIX C CALCULATIONS

The calculation results are provided in this section. Section C.1 provides the complete slacks for the BCC input reducing linear program. Details of the output from the proposed method are shown in Section C.2. Section C.3 provides the SAS printouts for the regression models and other statistical analyses performed.

C.1 Slacks for the Input Reducing BCC Model

Table C-1 and C-2 present the complete slacks generated for the BCC input reducing model using the program IDEAS.

Table C-1. Slacks for the BCC Input Reducing Model - 1st 50 Production Plans

Prod Plan.	Labor Hrs	Salary Hrs	Material	Power	Rework	Scrap	Water Use
1	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3	0.00	0.00	0.00	0.00	0.00	0.00	0.00
4	1.55	2.14	0.00	0.10	0.48	1.03	0.00
5	0.62	2.14	0.00	0.08	1.28	2.53	0.00
6	0.50	0.55	0.00	0.00	0.17	0.00	0.00
7	1.09	0.16	0.00	0.00	1.04	0.00	1.43
8	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10	0.00	0.00	0.00	0.00	0.00	0.00	0.00
11	0.00	0.00	0.00	0.00	0.00	0.00	0.00
12	0.00	0.00	0.00	0.00	0.00	0.00	0.00
13	0.00	0.14	0.00	3.39	1.21	0.02	0.00

Prod Plan.	Labor Hrs	Salary Hrs	Materia I	Power	Rework	Scrap	Water Use
14	4.47	0.36	0.00	3.41	0.62	1.46	0.00
15	4.97	0.36	0.00	3.41	1.84	2.30	0.00
16	0.00	0.00	0.00	0.00	0.00	0.00	0.00
17	3.86	3.06	0.00	0.00	1.59	0.63	0.00
18	0.00	0.00	0.00	0.00	0.00	0.00	0.00
19	4.11	0.00	1.20	0.00	1.01	0.38	0.00
20	0.00	0.00	0.00	0.00	0.00	0.00	0.00
21	4.22	2.36	0.74	0.00	0.52	0.00	0.00
22	0.00	0.00	0.00	0.00	0.00	0.00	0.00
23	2.31	1.91	1.11	0.58	0.00	0.00	0.48
24	3.44	2.20	0.53	0.04	0.93	0.00	0.00
25	2.68	1.55	0.55	0.17	2.63	0.00	0.00
26	0.27	0.00	0.27	0.39	0.35	0.00	0.00
27	3.89	2.49	0.71	0.00	0.48	0.00	0.00
28	0.00	0.00	0.00	0.00	0.00	0.00	0.00
29	0.00	0.00	0.00	0.00	0.00	0.00	0.00
30	3.24	2.49	0.43	0.00	1.25	0.00	0.00
31	3.17	2.23	0.49	0.00	0.00	0.00	0.15
32	2.05	0.00	0.40	1.94	0.00	0.00	1.19
33	1.49	0.61	0.10	0.00	0.00	0.00	0.24
34	0.00	0.00	0.00	0.00	0.00	0.00	0.00
35	0.00	0.00	0.00	0.00	0.00	0.00	0.00
36	1.49	0.47	0.41	0.00	0.00	0.00	3.43
37	0.00	0.00	0.60	0.00	0.00	0.00	3.53
38	2.46	1.53	0.66	0.00	0.00	0.00	3.49
39	3.79	3.11	0.87	3.02	1.07	0.93	0.00
40	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Prod Plan.	Labor Hrs	Salary Hrs	Material	Power	Rework	Scrap	Water Use
41	0.36	0.99	0.00	2.38	0.56	0.00	0.00
42	0.00	0.00	0.00	0.00	0.00	0.00	0.00
43	0.00	0.00	0.00	0.00	0.00	0.00	0.00
44	0.00	0.00	0.00	0.00	0.00	0.00	0.00
45	0.00	0.00	0.00	0.00	0.00	0.00	0.00
46	1.59	2.11	0.18	0.00	0.87	0.00	0.00
47	2.26	2.97	0.27	0.00	0.26	0.82	0.00
48	0.00	0.00	0.00	0.00	0.00	0.00	0.00
49	3.58	3.10	1.14	13.62	0.09	0.37	0.00
50	3.17	3.01	1.15	16.84	1.01	0.20	0.00

Table C-2. Slacks for the BCC Input Reducing Model - 2nd 50 Production Plans

Prod. Plan	Labor Hrs	Salary Hrs	Material	Power	Rework	Scrap	Water Use
51	0.00	0.00	0.00	0.00	0.00	0.00	0.00
52	1.58	2.08	0.35	0.00	1.59	0.00	0.18
53	2.00	2.23	0.00	0.00	2.76	0.42	0.34
54	0.00	0.00	0.00	0.00	0.00	0.00	0.00
55	2.49	0.93	0.00	0.00	1.39	0.46	0.35
56	2.45	2.74	0.00	0.00	2.21	0.36	0.36
57	1.17	2.63	0.00	0.00	0.06	0.00	0.20
58	3.04	2.17	1.02	0.00	0.00	0.00	0.32
59	2.68	2.67	0.60	0.00	0.72	0.49	0.31
60	2.44	2.61	0.56	0.00	1.53	0.25	0.28
61	2.05	2.20	0.86	0.00	0.00	0.00	0.11
62	1.17	2.42	0.00	0.00	0.00	0.35	0.04

Prod. Plan	Labor Hrs	Salary Hrs	Material	Power	Rework	Scrap	Water Use
63	1.86	2.92	0.00	0.00	2.34	0.00	0.22
64	0.00	0.00	0.00	0.00	0.00	0.00	0.00
65	0.00	0.00	0.00	0.00	0.00	0.00	0.00
66	0.00	0.00	0.00	0.00	0.00	0.00	0.00
67	2.73	2.83	0.00	0.00	4.38	0.36	0.00
68	0.00	0.00	0.00	0.00	0.00	0.00	0.00
69	0.00	0.00	0.00	0.00	0.00	0.00	0.00
70	0.00	0.00	0.00	0.00	0.00	0.00	0.00
71	0.00	0.00	0.00	0.00	0.00	0.00	0.00
72	0.00	0.00	0.00	0.00	0.00	0.00	0.00
73	0.00	0.00	0.00	0.00	0.00	0.00	0.00
74	0.00	0.00	0.00	0.00	0.00	0.00	0.00
75	1.37	2.38	0.57	0.00	0.45	1.00	0.00
76	0.00	0.00	0.00	0.00	0.00	0.00	0.00
77	1.99	2.31	0.91	0.28	0.00	0.00	0.00
78	2.19	2.91	0.58	0.00	0.39	0.42	0.35
79	2.36	2.91	1.41	0.00	0.69	0.00	0.35
80	2.50	2.99	1.21	0.00	0.55	0.04	0.35
81	1.63	1.04	1.32	0.00	0.00	0.00	0.29
82	2.60	3.44	1.14	0.00	1.82	0.18	0.30
83	2.69	3.44	1.14	0.00	1.83	0.47	0.30
84	0.00	1.91	0.81	0.15	0.00	0.00	0.45
85	1.97	1.98	0.56	0.00	1.87	1.10	0.26
86	1.91	3.38	0.31	0.00	1.02	0.00	0.05
87	2.18	3.37	0.46	0.00	0.00	0.00	0.05
88	2.96	3.08	1.19	0.00	0.70	0.00	0.07
89	1.84	2.24	0.79	0.00	0.00	0.00	0.00

Prod. Plan	Labor Hrs	Salary Hrs	Material	Power	Rework	Scrap	Water Use
90	3.42	2.83	1.41	0.49	0.00	0.00	0.39
91	2.38	2.95	0.53	0.00	1.09	0.00	1.41
92	0.96	1.73	0.09	0.00	0.28	0.01	1.41
93	2.55	1.67	0.32	0.22	0.00	0.00	1.67
94	2.44	3.53	0.39	0.00	0.52	0.00	1.50
95	2.91	3.65	0.35	0.00	3.33	0.00	1.63
96	2.13	0.00	0.42	0.11	0.00	0.00	1.79
97	0.00	0.00	0.00	0.00	0.00	0.00	0.00
98	2.74	3.79	0.53	0.46	0.00	0.00	2.08
99	2.81	3.01	0.81	0.00	0.00	0.00	1.28
100	1.73	1.87	0.28	0.65	0.00	0.00	2.21

C.2 Proposed Method Calculations

The results of calculations for the proposed method are presented in the following sections. These results were generated by the MATHEMATICA Program presented in Appendix D. In some cases (which are noted) additional manipulation of the results from the MATHEMATICA program were performed using Excel.

C.2.1 *Set Counts*

Table C-3 shows the counts for set membership with the first 50 observations while Table C-4 shows the counts for the second 50 observations.

Table C-3. Counts of Set Membership for the First 50 Observations

Obs. t	Dg	Dd	Di	TE	TI	TU	SE	SI
1	0	0	0	0	0	0	0	0
2	0	0	1	0	0	1	0	0
3	0	0	2	0	0	2	0	0
4	2	0	1	0	0	3	0	0
5	0	1	3	0	0	4	1	0
6	0	0	5	0	0	5	0	0
7	0	0	6	0	0	6	0	5
8	0	0	7	0	0	7	0	6
9	1	0	7	0	0	8	0	6
10	0	0	9	0	0	9	0	0
11	0	1	9	0	0	10	2	1
12	0	0	11	0	0	11	1	1
13	0	0	12	0	0	12	3	1
14	0	0	13	0	0	13	1	1
15	0	0	14	0	0	14	2	2
16	0	0	15	0	0	15	0	1
17	0	1	15	0	0	16	0	6
18	0	4	13	0	0	17	0	12
19	1	0	17	0	0	18	6	1
20	0	0	19	0	0	19	0	2
21	2	0	18	0	0	20	6	2
22	1	0	20	0	0	21	0	4
23	1	0	21	0	0	22	5	2
24	3	0	20	0	0	23	2	3
25	0	0	24	0	0	24	1	5
26	0	0	25	0	0	25	1	3
27	2	0	24	0	0	26	3	4

Obs. t	Dg	Dd	Di	TE	TI	TU	SE	SI
28	0	0	27	0	0	27	1	7
29	0	0	28	0	0	28	1	5
30	0	0	29	0	0	29	3	4
31	0	0	30	0	0	30	2	9
32	1	0	30	0	0	31	3	0
33	0	1	31	0	0	32	6	0
34	0	0	33	0	0	33	1	1
35	0	0	34	0	0	34	1	1
36	1	0	34	0	0	35	2	7
37	0	0	36	0	0	36	1	10
38	1	0	36	0	0	37	1	11
39	4	0	34	0	0	38	0	8
40	0	0	39	0	0	39	1	4
41	1	0	39	0	0	40	2	3
42	0	0	41	0	0	41	0	25
43	0	0	42	0	0	42	0	3
44	0	1	42	0	0	43	0	2
45	0	0	44	0	0	44	2	4
46	0	0	45	0	0	45	0	9
47	1	0	45	0	0	46	2	2
48	0	0	47	0	0	47	0	11
49	0	0	48	0	0	48	1	2
50	0	0	49	0	0	49	3	5

The MATHEMATICA Program considers input and output substitution separately for the determination of membership in the sets SE and SI. It is possible for a production plan to be in both sets. Where this occurs the counts have been adjusted accordingly by reducing the count in SE and SI by one for each time that a count occurs in both. This happened for observations 30 (1 in both SE and SI), 31 (one in both SE and SI), 33 (2 in both SE and SI), 36 (two in both SE and SI), 38 (two in both SE and SI), and 40 (on in both SE and SI).

Table C-4. Counts of Set Membership for the Second 50 Observations

Obs. T	Dg	Dd	Di	TE	TI	TU	SE	SI
51	0	0	0	0	0	0	0	0
52	0	0	1	0	0	1	0	0
53	0	0	2	0	0	2	0	0
54	0	1	2	0	0	3	0	1
55	0	0	4	0	0	4	0	1
56	0	0	5	0	0	5	0	1
57	0	1	5	0	0	6	0	2
58	0	0	7	0	0	7	0	3
59	1	0	7	0	0	8	0	0
60	0	0	9	0	0	9	2	0
61	0	0	10	0	0	10	0	0
62	0	0	11	0	0	11	4	0
63	0	0	12	0	0	12	4	0
64	0	0	13	0	0	13	0	0
65	0	0	14	0	0	14	0	1
66	0	0	15	0	0	15	0	3
67	1	0	15	0	0	16	0	3
68	0	0	17	0	0	17	0	4
69	0	1	17	0	0	18	0	0
70	0	2	17	0	0	19	0	8
71	0	0	20	0	0	20	2	0
72	0	0	21	0	0	21	1	0
73	0	0	22	0	0	22	3	1
74	1	0	22	0	0	23	2	0

Obs. T	Dg	Dd	Di	TE	TI	TU	SE	SI
75	0	0	24	0	0	24	1	1
76	0	0	25	0	0	25	0	5
77	0	0	26	0	0	26	1	0
78	1	0	26	0	0	27	7	0
79	0	0	28	0	0	28	7	0
80	1	0	28	0	0	29	10	0
81	0	0	30	0	0	30	0	0
82	2	0	29	0	0	31	11	0
83	0	0	32	0	0	32	5	0
84	0	0	33	0	0	33	5	0
85	0	0	34	0	0	34	5	0
86	2	0	33	0	0	35	8	0
87	3	0	33	0	0	36	12	1
88	0	0	37	0	0	37	5	0
89	0	0	38	0	0	38	1	1
90	0	0	39	0	0	39	11	6
91	0	0	40	0	0	40	5	0
92	0	0	41	0	0	41	13	0
93	0	0	42	0	0	42	3	0
94	0	0	43	0	0	43	8	1
95	0	0	44	0	0	44	8	3
96	0	3	42	0	0	45	2	0
97	0	0	46	0	0	46	27	0
98	0	0	47	0	0	47	20	0
99	1	0	47	0	0	48	10	0
100	0	0	49	0	0	49	0	0

The MATHEMATICA Program considers input and output substitution separately for the determination of membership in the sets SE and SI. It is possible for a production plan to be in both sets. Where this occurs the counts have been adjusted accordingly by reducing the count in SE and SI by one for each time

Obs. T	Dg	Dd	Di	TE	TI	TU	SE	SI
that a count occurs in both. This happened for observation 56 (1 in both SE and SI).								

C.2.2 Individual Observation Membership in Sets

Table C-5 presents the set memberships at each time t for the first 50 production plans. Then, the distance measures for each production plan at time t are presented for the first 50 production plans in Table C-6. The set memberships and distance measures for the second 50 production plans are presented in Table C-7 and Table C-8, respectively.

Table C-5. Set Memberships for the First 50 Production Plans

Dg	Dd	Di	TE	TI	TU	SE	SI
Dg $t= 2$	Dd $t= 2$	Di $t= 2$	TE $t= 2$	TI $t= 2$	TU $t= 2$	SE $t= 2$	SI $t= 2$
0	0	1	0	0	1	0	0
Dg $t= 3$	Dd $t= 3$	Di $t= 3$	TE $t= 3$	TI $t= 3$	TU $t= 3$	SE $t= 3$	SI $t= 3$
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
Dg $t= 4$	Dd $t= 4$	Di $t= 4$	TE $t= 4$	TI $t= 4$	TU $t= 4$	SE $t= 4$	SI $t= 4$
1	0	0	0	0	1	0	0
0	0	1	0	0	1	0	0
1	0	0	0	0	1	0	0
Dg $t= 5$	Dd $t= 5$	Di $t= 5$	TE $t= 5$	TI $t= 5$	TU $t= 5$	SE $t= 5$	SI $t= 5$
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	1	0
0	1	0	0	0	1	0	0
Dg $t= 6$	Dd $t= 6$	Di $t= 6$	TE $t= 6$	TI $t= 6$	TU $t= 6$	SE $t= 6$	SI $t= 6$
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0

Dg	Dd	Di	TE	TI	TU	SE	SI
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
Dg t= 7	Dd t= 7	Di t= 7	TE t= 7	TI t= 7	TU t= 7	SE t= 7	SI t= 7
0	0	1	0	0	1	0	1
0	0	1	0	0	1	0	1
0	0	1	0	0	1	0	1
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	1
0	0	1	0	0	1	0	1
Dg t= 8	Dd t= 8	Di t= 8	TE t= 8	TI t= 8	TU t= 8	SE t= 8	SI t= 8
0	0	1	0	0	1	0	1
0	0	1	0	0	1	0	1
0	0	1	0	0	1	0	1
0	0	1	0	0	1	0	1
0	0	1	0	0	1	0	1
0	0	1	0	0	1	0	1
0	0	1	0	0	1	0	0
Dg t= 9	Dd t= 9	Di t= 9	TE t= 9	TI t= 9	TU t= 9	SE t= 9	SI t= 9
0	0	1	0	0	1	0	1
0	0	1	0	0	1	0	1
0	0	1	0	0	1	0	1
0	0	1	0	0	1	0	1
0	0	1	0	0	1	0	1
0	0	1	0	0	1	0	1
0	0	1	0	0	1	0	0
1	0	0	0	0	1	0	0
Dg t= 10	Dd t= 10	Di t= 10	TE t= 10	TI t= 10	TU t= 10	SE t= 10	SI t= 10
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0

Dg	Dd	Di	TE	TI	TU	SE	SI
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
Dg t= 11	Dd t= 11	Di t= 11	TE t= 11	TI t= 11	TU t= 11	SE t = 11	SI t = 11
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	1
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	1	0
0	0	1	0	0	1	1	0
0	1	0	0	0	1	0	0
Dg t= 12	Dd t= 12	Di t= 12	TE t= 12	TI t= 12	TU t= 12	SE t = 12	SI t = 12
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	1
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	1	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
Dg t= 13	Dd t= 13	Di t= 13	TE t= 13	TI t= 13	TU t= 13	SE t = 13	SI t = 13
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	1
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0

Dg	Dd	Di	TE	TI	TU	SE	SI
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	1	0
0	0	1	0	0	1	1	0
0	0	1	0	0	1	1	0
Dg t= 14	Dd t= 14	Di t= 14	TE t= 14	TI t= 14	TU t= 14	SE t = 14	SI t = 14
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	1
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	1	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
Dg t= 15	Dd t= 15	Di t= 15	TE t= 15	TI t= 15	TU t= 15	SE t = 15	SI t = 15
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	1
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	1
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	1	0
0	0	1	0	0	1	1	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0

Dg	Dd	Di	TE	TI	TU	SE	SI
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
Dg t= 16	Dd t= 16	Di t= 16	TE t= 16	TI t= 16	TU t= 16	SE t = 16	SI t = 16
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	1
0	0	1	0	0	1	0	0
Dg t= 17	Dd t= 17	Di t= 17	TE t= 17	TI t= 17	TU t= 17	SE t = 17	SI t = 17
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	1
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	1
0	0	1	0	0	1	0	1
0	0	1	0	0	1	0	1
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	1
0	0	1	0	0	1	0	0

Dg	Dd	Di	TE	TI	TU	SE	SI
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	1
0	1	0	0	0	1	0	0
Dg t= 18	Dd t= 18	Di t= 18	TE t= 18	TI t= 18	TU t= 18	SE t = 18	SI t = 18
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	1
0	0	1	0	0	1	0	1
0	0	1	0	0	1	0	1
0	0	1	0	0	1	0	1
0	0	1	0	0	1	0	1
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	1
0	0	1	0	0	1	0	1
0	0	1	0	0	1	0	1
0	0	1	0	0	1	0	1
0	0	1	0	0	1	0	1
0	1	0	0	0	1	0	1
0	1	0	0	0	1	0	1
0	1	0	0	0	1	0	0
0	1	0	0	0	1	0	1
Dg t= 19	Dd t= 19	Di t= 19	TE t= 19	TI t= 19	TU t= 19	SE t = 19	SI t = 19
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	1
0	0	1	0	0	1	1	0
0	0	1	0	0	1	1	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	1	0
0	0	1	0	0	1	1	0
0	0	1	0	0	1	1	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0

Dg	Dd	Di	TE	TI	TU	SE	SI
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
1	0	0	0	0	1	1	0
Dg t= 20	Dd t= 20	Di t= 20	TE t= 20	TI t= 20	TU t= 20	SE t = 20	SI t = 20
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	1
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	1
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
Dg t= 21	Dd t= 21	Di t= 21	TE t= 21	TI t= 21	TU t= 21	SE t = 21	SI t = 21
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	1
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	1
0	0	1	0	0	1	0	0

Dg	Dd	Di	TE	TI	TU	SE	SI
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	1	0
0	0	1	0	0	1	1	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	1	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	1	0
1	0	0	0	0	1	1	0
0	0	1	0	0	1	0	0
1	0	0	0	0	1	1	0
Dg t= 22	Dd t= 22	Di t= 22	TE t= 22	TI t= 22	TU t= 22	SE t= 22	SI t= 22
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	1
0	0	1	0	0	1	0	1
0	0	1	0	0	1	0	1
0	0	1	0	0	1	0	1
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0

Dg	Dd	Di	TE	TI	TU	SE	SI
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
1	0	0	0	0	1	0	0
0	0	1	0	0	1	0	0
Dg t= 23	Dd t= 23	Di t= 23	TE t= 23	TI t= 23	TU t= 23	SE t = 23	SI t = 23
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	1
0	0	1	0	0	1	0	1
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	1	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	1	0
0	0	1	0	0	1	1	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
1	0	0	0	0	1	1	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	1	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
Dg t= 24	Dd t= 24	Di t= 24	TE t= 24	TI t= 24	TU t= 24	SE t = 24	SI t = 24
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	1
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	1
0	0	1	0	0	1	0	1

Dg	Dd	Di	TE	TI	TU	SE	SI
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
1	0	0	0	0	1	1	0
1	0	0	0	0	1	1	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
1	0	0	0	0	1	0	0
Dg t= 25	Dd t= 25	Di t= 25	TE t= 25	TI t= 25	TU t= 25	SE t = 25	SI t = 25
0	0	1	0	0	1	0	1
0	0	1	0	0	1	0	1
0	0	1	0	0	1	0	1
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	1
0	0	1	0	0	1	0	1
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0

Dg	Dd	Di	TE	TI	TU	SE	SI
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	1	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
Dg t= 26	Dd t= 26	Di t= 26	TE t= 26	TI t= 26	TU t= 26	SE t= 26	SI t= 26
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	1
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	1
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	1
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	1	0

Dg	Dd	Di	TE	TI	TU	SE	SI
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
Dg t= 27	Dd t= 27	Di t= 27	TE t= 27	TI t= 27	TU t= 27	SE t = 27	SI t = 27
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	1
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	1
0	0	1	0	0	1	0	1
0	0	1	0	0	1	0	1
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
1	0	0	0	0	1	1	0
1	0	0	0	0	1	1	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	1	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
Dg t= 28	Dd t= 28	Di t= 28	TE t= 28	TI t= 28	TU t= 28	SE t = 28	SI t = 28
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	1

Dg	Dd	Di	TE	TI	TU	SE	SI
0	0	1	0	0	1	0	1
0	0	1	0	0	1	0	1
0	0	1	0	0	1	0	1
0	0	1	0	0	1	0	1
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	1	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	1
0	0	1	0	0	1	0	1
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
Dg t= 29	Dd t= 29	Di t= 29	TE t= 29	TI t= 29	TU t= 29	SE t = 29	SI t = 29
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	1
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	1
0	0	1	0	0	1	0	1
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0

Dg	Dd	Di	TE	TI	TU	SE	SI
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	1	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	1
0	0	1	0	0	1	0	1
Dg t = 30	Dd t = 30	Di t = 30	TE t = 30	TI t = 30	TU t = 30	SE t = 30	SI t = 30
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	1
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	1
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	1
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0

Dg	Dd	Di	TE	TI	TU	SE	SI
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	1	0
0	0	1	0	0	1	1	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	1	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	1
0	0	1	0	0	1	1	1
0	0	1	0	0	1	0	0
Dg t= 31	Dd t= 31	Di t= 31	TE t= 31	TI t= 31	TU t= 31	SE t = 31	SI t = 31
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	1
0	0	1	0	0	1	0	1
0	0	1	0	0	1	0	1
0	0	1	0	0	1	0	1
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	1	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0

Dg	Dd	Di	TE	TI	TU	SE	SI
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	1	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	1
0	0	1	0	0	1	0	1
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	1
0	0	1	0	0	1	0	1
0	0	1	0	0	1	1	1
0	0	1	0	0	1	0	1
0	0	1	0	0	1	0	1
Dg t= 32	Dd t= 32	Di t= 32	TE t= 32	TI t= 32	TU t= 32	SE t = 32	SI t = 32
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	1	0
1	0	0	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	1	0
0	0	1	0	0	1	0	0

Dg	Dd	Di	TE	TI	TU	SE	SI
0	0	1	0	0	1	1	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	1	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	1	0	0	0	1	0	0
Dg t= 34	Dd t= 34	Di t= 34	TE t= 34	TI t= 34	TU t= 34	SE t = 34	SI t = 34
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0

Dg	Dd	Di	TE	TI	TU	SE	SI
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	1	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	1
0	0	1	0	0	1	0	0
Dg t= 36	Dd t= 36	Di t= 36	TE t= 36	TI t= 36	TU t= 36	SE t = 36	SI t = 36
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
1	0	0	0	0	1	1	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	1
0	0	1	0	0	1	0	1

Dg	Dd	Di	TE	TI	TU	SE	SI
1	0	0	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	1
0	0	1	0	0	1	0	1
0	0	1	0	0	1	0	1
0	0	1	0	0	1	0	1
0	0	1	0	0	1	0	1
0	0	1	0	0	1	1	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	1	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	1
0	0	1	0	0	1	1	1
0	0	1	0	0	1	0	1
0	0	1	0	0	1	0	1
0	0	1	0	0	1	0	1
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	1
0	0	1	0	0	1	0	1
Dg t= 39	Dd t= 39	Di t= 39	TE t= 39	TI t= 39	TU t= 39	SE t = 39	SI t = 39
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	1

Dg	Dd	Di	TE	TI	TU	SE	SI
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	1
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	1	0
0	0	1	0	0	1	0	0
1	0	0	0	0	1	1	0
Dg t= 42	Dd t= 42	Di t= 42	TE t= 42	TI t= 42	TU t= 42	SE t = 42	SI t = 42
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	1
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	1
0	0	1	0	0	1	0	1
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	1
0	0	1	0	0	1	0	1
0	0	1	0	0	1	0	1
0	0	1	0	0	1	0	1
0	0	1	0	0	1	0	1
0	0	1	0	0	1	0	1
0	0	1	0	0	1	0	1
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	1
0	0	1	0	0	1	0	1

Dg	Dd	Di	TE	TI	TU	SE	SI
0	0	1	0	0	1	0	1
0	0	1	0	0	1	0	1
0	0	1	0	0	1	0	1
0	0	1	0	0	1	0	1
0	0	1	0	0	1	0	1
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	1
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	1
0	0	1	0	0	1	0	1
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	1
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	1
0	0	1	0	0	1	0	1
0	0	1	0	0	1	0	1
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	1
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	1
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	1
0	0	1	0	0	1	0	0
Dg t= 43	Dd t= 43	Di t= 43	TE t= 43	TI t= 43	TU t= 43	SE t= 43	SI t= 43
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0

Dg	Dd	Di	TE	TI	TU	SE	SI
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	1
0	1	0	0	0	1	0	0
Dg t= 45	Dd t= 45	Di t= 45	TE t= 45	TI t= 45	TU t= 45	SE t= 45	SI t= 45
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	1
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	1
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	1
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0

Dg	Dd	Di	TE	TI	TU	SE	SI
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	1
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	1	0
0	0	1	0	0	1	1	0
Dg t= 46	Dd t= 46	Di t= 46	TE t= 46	TI t= 46	TU t= 46	SE t = 46	SI t = 46
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	1
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	1

Dg	Dd	Di	TE	TI	TU	SE	SI
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	1
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	1	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	1	0
0	0	1	0	0	1	0	0
1	0	0	0	0	1	0	0
Dg t= 48	Dd t= 48	Di t= 48	TE t= 48	TI t= 48	TU t= 48	SE t= 48	SI t= 48
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	1
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	1
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	1
0	0	1	0	0	1	0	1

Dg	Dd	Di	TE	TI	TU	SE	SI
0	0	1	0	0	1	0	0
0	0	1	0	0	1	1	0
0	0	1	0	0	1	1	0

Table C-6. Distance Measures for the First 50 Production Plans

Input		Product		Undesirable Output	
Input	t= 2	Product	t= 2	Undesirable Output	t= 2
	1.58447		1.0863		2.25799
Input	t= 3	Product	t= 3	Undesirable Output	t= 3
	1.09729		1.5263		1.05902
	1.9919		2.6126		2.82078
Input	t= 4	Product	t= 4	Undesirable Output	t= 4
	1.58767		0.1394		1.58763
	3.12014		0.9469		2.00695
	2.15681		1.6657		1.24178
Input	t= 5	Product	t= 5	Undesirable Output	t= 5
	1.38552		0.54		3.19561
	2.83842		1.6263		4.30591
	2.14258		0.9863		2.15334
	0.4065		0.6794		2.30452
Input	t= 6	Product	t= 6	Undesirable Output	t= 6
	3.01806		0.1389		0.824944
	3.73021		1.2252		2.23802
	3.20981		1.3874		0.583482
	3.06188		0.2783		0.843613
	3.03968		0.4011		2.47162
Input	t= 7	Product	t= 7	Undesirable Output	t= 7
	3.34456		0.9633		1.02668
	4.18708		2.0496		1.70196
	3.44094		0.563		1.13476
	3.26823		1.1027		0.647453
	3.31934		0.4233		2.78289

Input	Product	Undesirable Output
1.31752	0.8244	0.555649
Input t= 8	Product t= 8	Undesirable Output t= 8
3.74726	1.8318	2.92193
4.549	2.9181	2.22664
3.97936	0.3055	2.89774
3.60575	1.9712	2.04589
3.63363	1.2918	3.58457
2.15403	1.6929	2.51417
0.999381	0.8685	2.18879
Input t= 9	Product t= 9	Undesirable Output t= 9
3.75336	0.8088	2.62248
4.56069	1.8951	1.89701
3.98129	0.7175	2.82897
3.60611	0.9482	2.1134
3.63655	0.2688	3.90549
2.15856	0.6699	2.40029
0.995835	0.1545	2.05006
0.0229	1.023	0.671046
Input t= 10	Product t= 10	Undesirable Output t= 10
4.21428	0.3682	3.26768
5.08752	0.7181	2.23365
4.60467	1.8945	3.28742
3.80492	0.2288	2.33647
3.82659	0.9082	3.92127
5.38385	0.5071	2.86863
5.03952	1.3315	2.48829
4.85762	2.2	0.469138
4.85789	1.177	0.890436
Input t= 11	Product t= 11	Undesirable Output t= 11
4.14828	0.3604	3.08853
4.93662	1.4467	2.96083
4.59699	1.1659	2.69772
3.82212	0.4998	1.97191

Input	Product	Undesirable Output
3.80518	0.1796	2.78872
5.37112	0.2215	2.48818
5.06763	0.6029	2.3392
4.87445	1.4714	1.03879
4.87642	0.4484	1.59937
0.3624	0.7286	1.34337
Input t= 12	Product t= 12	Undesirable Output t= 12
4.1068	0.4646	1.92377
4.38889	1.5509	2.79103
3.81428	1.0617	1.81748
4.68816	0.604	1.87373
4.70651	0.0754	2.98241
5.57192	0.3257	1.70935
5.23903	0.4987	1.78322
5.33799	1.3672	1.77941
5.33819	0.3442	1.63714
3.31101	0.8328	2.2406
3.33171	0.1042	1.73759
Input t= 13	Product t= 13	Undesirable Output t= 13
6.38172	0.6204	2.28147
5.64641	0.4659	1.91045
6.54531	2.1467	2.60443
7.22171	0.481	2.10707
6.99128	1.1604	3.92283
7.62126	0.7593	2.19758
8.59811	1.5837	1.9061
9.18999	2.4522	1.13768
9.20067	1.4292	0.537083
8.15749	0.2522	1.42387
7.97551	0.9808	1.88589
7.46016	1.085	1.35139
Input t= 14	Product t= 14	Undesirable Output t= 14
6.02889	0.7778	3.17947

Input	Product	Undesirable Output
6.22961	0.3085	2.34546
5.72705	2.3041	3.11743
6.30364	0.6384	2.19159
6.31884	1.3178	3.66125
6.48368	0.9167	2.73261
7.2752	1.7411	2.39146
8.05431	2.6096	0.313405
8.05437	1.5866	0.930858
8.03087	0.4096	0.293683
8.04051	1.1382	1.0497
7.31654	1.2424	2.06562
5.83459	0.1574	1.43076
Input t= 15	Product t= 15	Undesirable Output t= 15
6.12966	0.7141	3.0967
6.43108	1.8004	3.25178
5.77585	0.8122	2.5771
6.32603	0.8535	2.00452
6.37315	0.1741	2.45921
6.53382	0.5752	2.46116
7.28014	0.2492	2.40756
8.06905	1.1177	1.44207
8.0677	0.0947	1.94135
8.04845	1.0823	1.77504
8.08052	0.3537	0.435807
7.33524	0.2495	1.70504
6.20941	1.3345	2.14916
0.5	1.4919	1.48152
Input t= 16	Product t= 16	Undesirable Output t= 16
4.61635	0.2355	3.78578
5.38305	1.3218	2.56444
4.76082	1.2908	3.74843
4.25881	0.3749	2.7061
4.29982	0.3045	4.15663

Input	Product	Undesirable Output
5.0026	0.0966	3.33215
5.47087	0.7278	2.93612
5.9414	1.5963	1.02054
5.94074	0.5733	1.4804
5.47687	0.6037	0.599171
5.5039	0.1249	1.59739
6.07511	0.2291	2.79419
6.9976	0.8559	2.01685
3.64073	1.0133	0.729853
3.64818	0.4786	2.02538
Input t= 17	Product t= 17	Undesirable Output t= 17
4.19249	1.3472	2.21428
4.80844	2.4335	2.14631
4.49279	0.1791	2.33827
4.02235	1.4866	1.86233
3.9849	0.8072	3.48791
4.74084	1.2083	1.99218
5.09965	0.3839	1.77235
5.4206	0.4846	0.969096
5.42326	0.5384	0.660954
4.8997	1.7154	1.37697
4.87069	0.9868	1.47678
5.56161	0.8826	0.977179
6.93951	1.9676	0.491584
4.39016	2.125	1.28235
4.48647	0.6331	1.69329
1.26073	1.1117	1.96939
Input t= 18	Product t= 18	Undesirable Output t= 18
5.63355	1.4641	3.28467
4.66272	2.5504	1.79875
5.84506	0.0622	3.70995
6.73655	1.6035	2.90405
6.47633	0.9241	4.90476

Input	Product	Undesirable Output
6.61763	1.3252	3.20422
7.19777	0.5008	2.75314
7.51859	0.3677	1.51699
7.53225	0.6553	1.10392
7.51037	1.8323	1.34574
7.30235	1.1037	2.55562
6.56929	0.9995	2.67247
5.25777	2.0845	1.34176
5.62882	2.2419	1.59093
6.03314	0.75	2.94986
5.65807	1.2286	1.66799
4.92375	0.1169	1.7136
Input t= 19	Product t= 19	Undesirable Output t= 19
8.86595	0.3436	2.51867
8.9168	0.7427	1.84557
8.69325	1.8699	2.7976
9.19232	0.2042	2.15202
9.18713	0.8836	3.99021
8.0246	0.4825	2.36499
8.22392	1.3069	2.02129
8.58594	2.1754	0.88958
8.58695	1.1524	0.223565
10.0618	0.0246	1.1061
10.0568	0.704	1.77633
9.3766	0.8082	1.59404
10.3576	0.2768	0.348918
6.93494	0.4342	1.15438
6.97831	1.0577	2.09525
6.84209	0.5791	1.68938
6.75481	1.6908	0.631204
7.2889	1.8077	1.08288
Input t= 20	Product t= 20	Undesirable Output t= 20
8.79494	3.207	3.48912

Input	Product	Undesirable Output
9.21457	4.2933	3.51126
8.87076	1.6807	2.92149
8.63953	3.3464	2.26973
8.66089	2.667	2.50374
7.73484	3.0681	2.81042
7.90386	2.2437	2.73853
8.13979	1.3752	1.66946
8.13925	2.3982	2.25031
9.40268	3.5752	1.91016
9.41933	2.8466	0.651202
9.73005	2.7424	2.16492
10.8869	3.8274	2.52444
7.37983	3.9848	1.62395
7.38196	2.4929	0.459882
6.09301	2.9715	2.02632
6.07539	1.8598	2.09336
8.18007	1.7429	3.18244
3.0137	3.5506	2.427
Input t= 21	Product t= 21	Undesirable Output t= 21
8.84307	0.1058	2.23394
9.29939	1.1921	1.37126
8.8974	1.4205	2.55932
8.65781	0.2452	1.81196
8.69186	0.4342	3.84354
7.76822	0.0331	2.06535
7.92744	0.8575	1.64694
8.17612	1.726	1.03846
8.17481	0.703	0.556833
9.43543	0.474	1.21532
9.46245	0.2546	1.8788
9.76147	0.3588	1.71238
10.9796	0.7262	0.626769
7.35994	0.8836	1.26988

Input	Product	Undesirable Output
7.34357	0.6083	2.19174
6.08926	0.1297	1.75816
6.11899	1.2414	0.842769
8.33941	1.3583	1.1546
3.07851	0.4494	0.505717
0.281645	3.1012	2.51201
Input t= 22	Product t= 22	Undesirable Output t= 22
8.86612	2.6303	1.72687
9.33473	3.7166	2.03225
8.95006	1.104	1.74591
8.65207	2.7697	1.30558
8.68283	2.0903	2.99841
7.78515	2.4914	1.3966
7.9492	1.667	1.22249
8.18255	0.7985	1.26991
8.18144	1.8215	1.1129
9.41618	2.9985	1.69019
9.44054	2.2699	1.49797
9.82826	2.1657	0.823525
11.0119	3.2507	0.946513
7.44851	3.4081	1.55194
7.4371	1.9162	1.6221
6.08742	2.3948	2.24346
6.1079	1.2831	0.61021
8.39084	1.1662	2.1187
3.30437	2.9739	1.098
0.330835	0.5767	2.03857
0.261922	2.5245	1.0201
Input t= 23	Product t= 23	Undesirable Output t= 23
8.18592	1.217	3.20031
8.52994	2.3033	1.7558
8.36043	0.3093	3.33102
8.07683	1.3564	2.27271

Input	Product	Undesirable Output
8.05707	0.677	4.11121
6.57021	1.0781	2.84073
6.8532	0.2537	2.37429
7.0981	0.6148	0.959155
7.1002	0.4082	1.10252
9.0654	1.5852	0.646071
9.04882	0.8566	1.81907
9.49365	0.7524	2.56337
10.2911	1.8374	1.58656
7.6063	1.9948	0.860969
7.66381	0.5029	2.2367
6.31208	0.9815	0.814797
6.19789	0.1302	1.66187
7.96378	0.2471	1.15949
4.18348	1.5606	1.26266
2.80908	1.99	2.36297
2.9018	1.1112	1.14193
2.8642	1.4133	1.86676
Input t= 24	Product t= 24	Undesirable Output t= 24
8.26483	1.1464	1.8475
8.72141	2.2327	2.02767
8.39987	0.3799	1.81578
8.05753	1.2858	1.27152
8.07123	0.6064	2.95751
6.60146	1.0075	1.46148
6.82691	0.1831	1.26106
7.07973	0.6854	1.13873
7.07969	0.3376	1.05407
9.04005	1.5146	1.56074
9.05005	0.786	1.35402
9.51799	0.6818	0.91651
10.5831	1.7668	0.971381
7.63456	1.9242	1.41091

Input	Product	Undesirable Output
7.64858	0.4323	1.49888
6.26518	0.9109	2.10231
6.23596	0.2008	0.607732
8.35959	0.3177	2.07891
4.30142	1.49	1.07162
2.70154	2.0606	1.90368
2.73249	1.0406	0.990989
2.69676	1.4839	0.164718
0.678785	0.0706	1.74988
Input t= 25	Product t= 25	Undesirable Output t= 25
8.32278	1.6017	1.99017
8.81788	2.688	3.80983
8.43328	0.0754	1.45927
8.08206	1.7411	2.36318
8.10955	1.0617	2.46108
6.64674	1.4628	1.84341
6.87612	0.6384	2.29298
7.15433	0.2301	3.19074
7.15341	0.7929	3.11913
9.09995	1.9699	3.65467
9.12084	1.2413	2.82373
9.57466	1.1371	1.52696
10.6477	2.2221	2.81241
7.57009	2.3795	3.44393
7.56603	0.8876	2.58481
6.24316	1.3662	4.16224
6.27522	0.2545	2.47055
8.51484	0.1376	4.13432
4.34219	1.9453	3.07316
2.70661	1.6053	2.97402
2.70547	1.4959	3.07338
2.67668	1.0286	2.08823
0.964751	0.3847	3.92596

Input	Product	Undesirable Output
0.322283	0.4553	2.18253
Input t= 26	Product t= 26	Undesirable Output t= 26
8.34477	2.4178	1.74553
8.85769	3.5041	2.3651
8.42314	0.8915	1.54022
8.09977	2.5572	1.2499
8.13802	1.8778	2.65067
6.66345	2.2789	1.30766
6.88548	1.4545	1.27817
7.18477	0.586	1.46998
7.18316	1.609	1.44411
9.13864	2.786	1.91604
9.16801	2.0574	1.40824
9.56414	1.9532	0.667164
10.6858	3.0382	1.30339
7.50164	3.1956	1.72859
7.48309	1.7037	1.42457
6.23878	2.1823	2.43605
6.30875	1.0706	0.89241
8.58849	0.9537	2.49228
4.28182	2.7614	1.45357
2.71306	0.7892	1.85825
2.68832	2.312	1.40846
2.67796	0.2125	0.400974
1.17959	1.2008	2.15018
0.561677	1.2714	0.427554
0.264461	0.8161	1.77621
Input t= 27	Product t= 27	Undesirable Output t= 27
7.17804	0.7707	2.20514
7.70028	1.857	1.47679
7.30522	0.7556	2.44813
6.94583	0.9101	1.67647
6.96725	0.2307	3.65864

Input	Product	Undesirable Output
6.098	0.6318	1.96952
6.37617	0.1926	1.56769
6.6884	1.0611	0.902347
6.68804	0.0381	0.523559
7.88056	1.1389	1.13364
7.89638	0.4103	1.68746
8.37067	0.3061	1.59301
9.45581	1.3911	0.648696
6.65996	1.5485	1.14626
6.66892	0.0566	1.99418
5.21137	0.5352	1.68721
5.23451	0.5765	0.734353
7.63503	0.6934	1.29678
5.06693	1.1143	0.530445
3.89294	2.4363	2.31645
3.90354	0.6649	0.203795
3.88919	1.8596	0.873381
3.34918	0.4463	1.12274
3.26631	0.3757	0.822088
3.26227	0.831	2.95274
3.27788	1.6471	1.24713
Input t= 28	Product t= 28	Undesirable Output t= 28
7.16211	2.143	2.61141
7.66641	3.2293	1.44059
7.30001	0.6167	2.83979
6.94412	2.2824	1.92637
6.95903	1.603	3.90483
6.08958	2.0041	2.34225
6.3783	1.1797	1.89219
6.68752	0.3112	0.825962
6.68753	1.3342	0.602807
7.87891	2.5112	0.846031
7.8896	1.7826	1.75595

Input	Product	Undesirable Output
8.37014	1.6784	2.021
9.40511	2.7634	0.974391
6.65969	2.9208	0.960309
6.67702	1.4289	2.12621
5.21403	1.9075	1.32902
5.22005	0.7958	1.10692
7.5693	0.6789	1.02113
5.05894	2.4866	0.700131
3.89722	1.064	2.37507
3.91557	2.0372	0.470334
3.8991	0.4873	1.30775
3.32566	0.926	0.671847
3.26489	0.9966	1.22505
3.27027	0.5413	3.39597
3.29329	0.2748	1.65061
0.111724	1.3723	0.472234
Input t= 29	Product t= 29	Undesirable Output t= 29
7.19338	2.5636	2.21055
7.75511	3.6499	1.90295
7.30153	1.0373	2.17138
6.93277	2.703	1.36219
6.96796	2.0236	3.10025
6.0977	2.4247	1.77256
6.32226	1.6003	1.46553
6.61968	0.7318	0.741784
6.6185	1.7548	0.828493
7.82339	2.9318	1.12497
7.85019	2.2032	1.13956
8.31755	2.099	1.33427
9.62478	3.184	1.00005
6.75091	3.3414	0.980369
6.74234	1.8495	1.40449
5.23772	2.3281	1.64271

Input	Product	Undesirable Output
5.26457	1.2164	0.71294
7.77417	1.0995	1.81617
5.08776	2.9072	0.934104
3.88512	0.6434	1.73886
3.88252	2.4578	0.826135
3.87224	0.0667	0.627422
3.40265	1.3466	1.30515
3.2737	1.4172	0.477575
3.25863	0.9619	2.62337
3.26232	0.1458	0.847392
0.291525	1.7929	0.622487
0.387243	0.4206	0.876245
Input t= 30	Product t= 30	Undesirable Output t= 30
7.33321	1.2805	1.61711
7.9621	2.3668	2.27621
7.52646	0.2458	1.53221
6.95346	1.4199	1.30726
6.988	0.7405	2.80783
6.21641	1.1416	1.27098
6.39528	0.3172	1.2297
6.61217	0.5513	1.5242
6.61102	0.4717	1.40336
7.7324	1.6487	1.96376
7.75908	0.9201	1.57685
8.51596	0.8159	0.609677
9.93584	1.9009	1.19259
7.19296	2.0583	1.80054
7.18557	0.5664	1.61589
5.34826	1.045	2.50683
5.33132	0.0667	0.828211
8.09092	0.1836	2.42223
5.56659	1.6241	1.38153
3.9963	1.9265	2.05226

Input	Product	Undesirable Output
3.99859	1.1747	1.33036
3.94278	1.3498	0.317472
3.47992	0.0635	2.17055
3.32549	0.1341	0.422197
3.323	0.3212	1.77182
3.36111	1.1373	0.208078
0.855525	0.5098	1.18982
0.88967	0.8625	1.62442
0.754092	1.2831	0.894118
Input t= 31	Product t= 31	Undesirable Output t= 31
7.4111	1.6115	2.56705
8.09598	2.6978	1.52614
7.56931	0.0852	2.73705
6.98478	1.7509	1.81333
7.04101	1.0715	3.74718
6.27374	1.4726	2.25379
6.41692	0.6482	1.81983
6.64255	0.2203	0.704877
6.6401	0.8027	0.583349
7.76057	1.9797	0.786431
7.80471	1.2511	1.59526
8.54117	1.1469	1.9173
10.117	2.2319	0.971883
7.22153	2.3893	0.853603
7.18794	0.8974	1.96138
5.37288	1.376	1.29028
5.41218	0.2643	1.02647
8.32152	0.1474	1.17154
5.62723	1.9551	0.711732
4.02706	1.5955	2.21247
4.00374	1.5057	0.502118
3.95476	1.0188	1.19844
3.60502	0.3945	0.698069

Input	Product	Undesirable Output
3.38284	0.4651	1.10157
3.34946	0.0098	3.28224
3.36304	0.8063	1.52214
1.02229	0.8408	0.431171
1.09043	0.5315	0.170123
0.839218	0.9521	0.722061
0.3777	0.331	1.5117
Input t= 32	Product t= 32	Undesirable Output t= 32
6.10823	0.1577	3.87969
6.62405	1.244	2.42307
5.98484	1.3686	3.85474
6.08341	0.2971	2.70669
6.14472	0.3823	4.23816
5.32208	0.0188	3.4043
5.4952	0.8056	2.96165
5.922	1.6741	1.43247
5.91944	0.6511	1.82989
6.44515	0.5259	1.03331
6.49555	0.2027	1.95559
6.2684	0.3069	3.15797
8.26372	0.7781	2.35043
5.87862	0.9355	1.16868
5.84141	0.5564	2.36424
4.84797	0.0778	0.599494
4.88365	1.1895	2.33409
7.04373	1.3064	1.85217
6.01328	0.5013	2.02275
5.84347	3.0493	2.32629
5.82966	0.0519	1.94958
5.89312	2.4726	2.5054
5.0854	1.0593	0.834991
5.00096	0.9887	2.36225
4.98108	1.444	4.45637

Input	Product	Undesirable Output
4.93014	2.2601	2.70812
4.61561	0.613	1.89422
4.63114	1.9853	1.48347
4.58213	2.4059	1.88514
4.86629	1.1228	2.77831
4.85534	1.4538	1.46496
Input t= 33	Product t= 33	Undesirable Output t= 33
5.92499	0.9067	2.8914
5.90346	1.993	1.6524
6.08891	0.6196	3.01461
6.30201	1.0461	2.00234
6.19458	0.3667	3.86785
5.39704	0.7678	2.53249
5.78449	0.0566	2.08409
6.0895	0.9251	0.727346
6.09668	0.0979	0.829728
6.58188	1.2749	0.590671
6.48908	0.5463	1.6157
6.41232	0.4421	2.2265
7.14416	1.5271	1.29618
6.26554	1.6845	0.730674
6.43384	0.1926	2.01681
5.30265	0.6712	0.978838
4.88962	0.4405	1.33832
5.4593	0.5574	1.17518
6.12473	1.2503	0.993659
6.20125	2.3003	2.19777
6.30297	0.8009	0.848328
6.33304	1.7236	1.52147
5.08383	0.3103	0.345446
5.33021	0.2397	1.40624
5.45038	0.695	3.58509
5.50871	1.5111	1.8106

Input	Product	Undesirable Output
5.02972	0.136	0.797831
4.98666	1.2363	0.391245
5.11101	1.6569	0.969677
5.35317	0.3738	1.82621
5.52213	0.7048	0.366735
2.58323	0.749	1.10264
Input t= 34	Product t= 34	Undesirable Output t= 34
6.22311	2.6631	4.09027
6.91221	3.7494	3.5297
6.39298	1.1368	3.9606
5.86163	2.8025	3.27304
5.90668	2.1231	4.24713
5.33925	2.5242	3.69138
5.45591	1.6998	3.465
5.68081	0.8313	4.70405
5.67923	1.8543	4.82595
5.94488	3.0313	4.70727
5.98315	2.3027	4.74725
6.73078	2.1985	5.13467
8.76477	3.2835	4.96405
6.7375	3.4409	4.68334
6.72517	1.949	4.84282
4.75229	2.4276	4.73704
4.66213	1.3159	4.89418
7.52865	1.199	5.04365
6.74145	3.0067	4.88587
5.7323	0.5439	4.86497
5.73604	2.5573	4.41184
5.71649	0.0328	4.45922
4.82125	1.4461	4.27778
4.71509	1.5167	4.40481
4.72372	1.0614	5.37922
4.74138	0.2453	4.50158

Input	Product	Undesirable Output
4.38902	1.8924	4.36378
4.39754	0.5201	4.31814
4.35188	0.0995	4.27998
4.33492	1.3826	4.54347
4.34616	1.0516	4.2845
1.90349	2.5054	4.3087
2.95475	1.7564	4.25238
Input t= 35	Product t= 35	Undesirable Output t= 35
6.27381	2.929	4.14387
6.99808	4.0153	3.73273
6.42049	1.4027	3.91319
5.88162	3.0684	3.26016
5.94101	2.389	4.01701
5.37576	2.7901	3.69097
5.46922	1.9657	3.50776
5.69976	1.0972	4.74868
5.69734	2.1202	4.91053
5.96458	3.2972	4.77124
6.01548	2.5686	4.7048
6.74792	2.4644	5.1336
8.87957	3.5494	5.05324
6.75386	3.7068	4.72444
6.72585	2.2149	4.76933
4.76679	2.6935	4.79636
4.71299	1.5818	4.94539
7.66753	1.4649	5.20218
6.76887	3.2726	4.97964
5.74349	0.278	4.77208
5.73719	2.8232	4.51913
5.72026	0.2987	4.48992
4.87146	1.712	4.38293
4.73685	1.7826	4.43146
4.73313	1.3273	5.30669

Input	Product	Undesirable Output
4.7411	0.5112	4.49805
4.40784	2.1583	4.45428
4.42168	0.786	4.42443
4.35947	0.3654	4.31564
4.34299	1.6485	4.55457
4.33581	1.3175	4.37626
1.88514	2.7713	4.38454
3.12251	2.0223	4.34541
0.2116	0.2659	0.396314
Input t= 36	Product t= 36	Undesirable Output t= 36
9.60308	1.6966	3.66489
10.0937	2.7829	3.55448
9.69824	0.1703	3.48947
9.34964	1.836	3.02782
9.38795	1.1566	3.8523
7.49405	1.5577	3.3017
7.5599	0.7333	3.17785
7.72874	0.1352	4.7246
7.72689	0.8878	4.80868
10.6958	2.0648	4.80501
10.7249	1.3362	4.70051
11.1516	1.232	4.87243
12.5632	2.317	4.87261
10.44	2.4744	4.74983
10.4209	0.9825	4.74219
9.27862	1.4611	4.92167
9.25275	0.3494	4.77293
11.0607	0.2325	5.14873
7.58478	2.0402	4.84849
6.6841	1.5104	4.81131
6.6779	1.5908	4.37607
6.66357	0.9337	4.2743
5.50815	0.4796	4.43143

Input	Product	Undesirable Output
5.38711	0.5502	4.24162
5.38286	0.0949	4.9167
5.3891	0.7212	4.27445
5.3533	0.9259	4.31878
5.36509	0.4464	4.35944
5.31269	0.867	4.20148
5.29921	0.4161	4.30848
5.29196	0.0851	4.31296
7.53246	1.5389	4.5677
7.93931	0.7899	4.34437
7.29653	0.9665	0.793178
7.2929	1.2324	0.747695
Input t= 37	Product t= 37	Undesirable Output t= 37
9.65284	2.7258	3.93215
10.1768	3.8121	3.98005
9.72891	1.1995	3.56744
9.37336	2.8652	3.13528
9.42339	2.1858	3.52964
7.53707	2.5869	3.46029
7.58022	1.7625	3.3995
7.75347	0.894	4.85305
7.75082	1.917	5.01846
10.7149	3.094	4.95006
10.7532	2.3654	4.68207
11.1697	2.2612	4.97754
12.6755	3.3462	5.10836
10.4638	3.5036	4.86111
10.4317	2.0117	4.67525
9.29733	2.4903	5.03733
9.29422	1.3786	4.94605
11.1904	1.2617	5.459
7.62628	3.0694	5.07967
6.70787	0.4812	4.69757

Input	Product	Undesirable Output
6.69066	2.62	4.6364
6.67925	0.0955	4.42943
5.57883	1.5088	4.64042
5.42593	1.5794	4.38442
5.40803	1.1241	4.92393
5.40339	0.308	4.37372
5.38792	1.9551	4.55134
5.40531	0.5828	4.59887
5.33525	0.1622	4.34218
5.32192	1.4453	4.43724
5.2952	1.1143	4.52982
7.53647	2.5681	4.6988
8.03115	1.8191	4.54769
7.31033	0.0627	1.12607
7.29877	0.2032	0.811816
0.274141	1.0292	0.698866
Input t= 38	Product t= 38	Undesirable Output t= 38
9.83863	1.2736	4.37423
10.4352	2.3599	3.83127
9.96942	0.2527	4.13557
9.44932	1.413	3.41081
9.50533	0.7336	4.15764
7.71937	1.1347	3.89655
7.747	0.3103	3.68739
7.87624	0.5582	4.78982
7.8732	0.4648	4.97981
10.7405	1.6418	4.78415
10.7837	0.9132	4.74788
11.4151	0.809	5.27882
12.9516	1.894	5.15475
10.7376	2.0514	4.74417
10.6993	0.5595	4.82576
9.38122	1.0381	4.76792

Input	Product	Undesirable Output
9.38858	0.0736	5.04853
11.5217	0.1905	5.23986
8.02868	1.6172	5.06001
6.83094	1.9334	4.80135
6.80833	1.1678	4.6063
6.77062	1.3567	4.61663
5.7153	0.0566	4.38752
5.52915	0.1272	4.54836
5.50479	0.3281	5.51178
5.51332	1.1442	4.63199
5.50893	0.5029	4.54068
5.52862	0.8694	4.47889
5.44998	1.29	4.40047
5.33568	0.0069	4.69567
5.29842	0.3379	4.43209
7.76263	1.1159	4.33036
8.28954	0.3669	4.37396
7.36094	1.3895	0.517559
7.34518	1.6554	0.331066
0.865443	0.423	1.07642
0.769285	1.4522	1.07218
Input t= 39	Product t= 39	Undesirable Output t= 39
9.71032	0.3944	4.0747
10.2173	0.6919	3.59413
9.89337	1.9207	3.90219
9.39136	0.255	3.23551
9.41532	0.9344	4.12214
7.61188	0.5333	3.65423
7.6968	1.3577	3.44879
7.81093	2.2262	1.39864
7.81007	1.2032	1.80494
10.6896	0.0262	1.44814
10.7076	0.7548	1.41676

Input	Product	Undesirable Output
11.3678	0.859	2.42433
12.6607	0.226	2.14469
10.6889	0.3834	1.33048
10.6857	1.1085	1.66627
9.34123	0.6299	1.55114
9.28405	1.7416	1.93476
11.1802	1.8585	2.40538
7.93006	0.0508	1.96715
6.77844	3.6014	1.71461
6.78584	0.5002	2.3325
6.74013	3.0247	2.35042
5.53875	1.6114	2.08371
5.43897	1.5408	2.24437
5.45233	1.9961	3.74166
5.49065	2.8122	2.40077
5.43154	1.1651	2.22524
5.4361	2.5374	2.1554
5.40452	2.958	2.00484
5.28791	1.6749	2.48807
5.30408	2.0059	2.07303
7.76186	0.5521	2.13484
8.05218	1.3011	2.01329
7.33251	3.0575	5.92149
7.33838	3.3234	5.92331
0.823312	2.091	5.96146
0.96559	3.1202	5.99646
0.7513	1.668	5.93473
Input t= 40	Product t= 40	Undesirable Output t= 40
4.77341	1.2612	4.57549
5.00472	2.3475	3.58378
5.04849	0.2651	4.52963
4.96799	1.4006	3.67946
4.86938	0.7212	4.83495

Input	Product	Undesirable Output
5.3249	1.1223	4.18601
5.62892	0.2979	3.86954
5.87041	0.5706	1.68257
5.87608	0.4524	2.03024
5.52937	1.6294	1.43884
5.44912	0.9008	2.06655
5.7731	0.7966	3.15497
7.04088	1.8816	2.47564
6.21251	2.039	1.49872
6.34623	0.5471	2.41672
4.71811	1.0257	1.25196
4.2892	0.086	2.42935
5.6933	0.2029	2.16401
7.43833	1.6048	2.19927
7.16393	1.9458	2.39466
7.23695	1.1554	2.51556
7.24154	1.3691	2.88687
6.61677	0.0442	1.90495
6.74743	0.1148	2.77129
6.82913	0.3405	4.57227
6.87816	1.1566	3.03832
5.52731	0.4905	2.46218
5.49716	0.8818	2.21145
5.57568	1.3024	2.41981
5.69757	0.0193	3.10205
5.82699	0.3503	2.1861
4.42192	1.1035	1.76625
3.89219	0.3545	1.9967
4.35182	1.4019	5.97906
4.44568	1.6678	6.02373
8.71497	0.4354	6.13878
8.78424	1.4646	6.22481
8.95005	0.0124	5.99462

Input	Product	Undesirable Output
8.76999	1.6556	0.981383
Input t= 41	Product t= 41	Undesirable Output t= 41
5.00052	1.1188	4.66378
5.70959	2.2051	3.8741
5.00356	0.4075	4.4715
4.80718	1.2582	3.64484
4.87588	0.5788	4.50157
5.31702	0.9799	4.18726
5.40965	0.1555	3.92407
5.71915	0.713	1.79845
5.71692	0.31	2.28822
5.38527	1.487	1.64378
5.43857	0.7584	1.83493
5.6322	0.6542	3.15276
8.06385	1.7392	2.72756
6.07382	1.8966	1.59484
6.04642	0.4047	2.11746
4.44627	0.8833	1.42766
4.37342	0.2284	2.56726
6.97659	0.3453	2.64598
7.41934	1.4624	2.47835
6.98133	2.0882	2.00335
6.97824	1.013	2.77188
7.00334	1.5115	2.94757
6.67869	0.0982	2.17373
6.60907	0.0276	2.81891
6.60907	0.4829	4.45496
6.59401	1.299	3.01898
5.32182	0.3481	2.67548
5.33281	1.0242	2.47473
5.28332	1.4448	2.48183
5.41525	0.1617	3.12038
5.41267	0.4927	2.40837

Input	Product	Undesirable Output
3.88449	0.9611	1.92125
4.58674	0.2121	2.22649
3.94473	1.5443	5.97181
3.94148	1.8102	5.97479
8.46434	0.5778	6.11188
8.47083	1.607	6.1265
8.6079	0.1548	5.94081
8.59814	1.5132	0.816449
2.0115	0.1424	0.636525
Input t= 42	Product t= 42	Undesirable Output t= 42
5.66931	2.0268	4.13522
6.47314	3.1131	4.37942
5.9854	0.5005	3.63028
5.20877	2.1662	3.2892
5.25155	1.4868	3.27548
5.90087	1.8879	3.60654
5.56971	1.0635	3.61576
5.39689	0.195	2.27143
5.39565	1.218	2.71083
4.72869	2.395	2.53398
4.769	1.6664	1.51821
6.00464	1.5622	2.36378
9.67348	2.6472	2.88355
8.22957	2.8046	2.2833
8.22565	1.3127	1.33037
5.59078	1.7913	2.69931
5.09732	0.6796	2.47089
7.97421	0.5627	3.63223
8.49494	2.3704	2.84621
7.51566	1.1802	1.31696
7.5433	1.921	3.13168
7.50859	0.6035	2.62057
7.16769	0.8098	3.14285

Input	Product	Undesirable Output
7.09503	0.8804	2.53506
7.15593	0.4251	3.12861
7.20171	0.391	2.43155
6.04091	1.2561	2.9649
6.04501	0.1162	3.07577
5.95467	0.5368	2.49114
5.78731	0.7463	2.58028
5.80235	0.4153	2.93757
5.18896	1.8691	3.18112
5.52532	1.1201	2.97193
4.41071	0.6363	6.15132
4.42065	0.9022	6.06329
8.6984	0.3302	6.05434
8.71096	0.699	5.94823
8.70102	0.7532	6.10592
8.66817	2.4212	1.50229
3.23117	0.7656	2.42447
2.73344	0.908	1.98199
Input t= 43	Product t= 43	Undesirable Output t= 43
6.13481	1.6051	5.79501
6.98091	2.6914	4.7083
6.38897	0.0788	5.55223
5.64906	1.7445	4.57957
5.72445	1.0651	5.28326
6.32249	1.4662	5.24824
5.79208	0.6418	4.94054
5.50355	0.2267	2.92659
5.50024	0.7963	3.4523
4.85473	1.9733	2.64278
4.9312	1.2447	2.9104
6.10368	1.1405	4.44417
10.4712	2.2255	3.94952
8.91605	2.3829	2.6479

Input	Product	Undesirable Output
8.88411	0.891	3.16782
6.21504	1.3696	2.16113
5.69902	0.2579	3.81976
8.60097	0.141	3.57179
8.85474	1.9487	3.65562
7.88677	1.6019	2.90142
7.90371	1.4993	3.85606
7.87511	1.0252	4.13729
7.62044	0.3881	2.96144
7.50768	0.4587	3.99132
7.56593	0.0034	5.68447
7.60247	0.8127	4.20966
6.54417	0.8344	3.76994
6.55655	0.5379	3.4663
6.42316	0.9585	3.58957
6.23731	0.3246	4.32792
6.22073	0.0064	3.41648
5.6572	1.4474	2.35126
6.14949	0.6984	3.13479
4.9121	1.058	6.3036
4.8993	1.3239	6.2973
8.95007	0.0915	6.58563
8.94601	1.1207	6.55051
8.92579	0.3315	6.19223
8.93627	1.9995	2.18949
4.11371	0.3439	1.64481
3.45332	0.4863	1.37721
0.99958	0.4217	3.04249
Input t= 44	Product t= 44	Undesirable Output t= 44
5.72222	2.1271	5.13206
6.19459	3.2134	4.08946
5.5739	0.6008	4.97437
5.892	2.2665	4.05045

Input	Product	Undesirable Output
5.95387	1.5871	4.97305
6.15368	1.9882	4.6515
5.62316	1.1638	4.33898
5.55108	0.2953	2.21766
5.54843	1.3183	2.68796
5.42403	2.4953	1.94338
5.48246	1.7667	2.35925
4.87881	1.6625	3.73622
9.74142	2.7475	3.16846
8.12719	2.9049	1.96629
8.10159	1.413	2.66696
6.40186	1.8916	1.5501
5.88138	0.7799	3.06775
7.55535	0.663	2.82385
7.92294	2.4707	2.88047
7.99972	1.0799	2.50387
8.02162	2.0213	3.1301
8.08357	0.5032	3.44572
7.81516	0.9101	2.33773
7.77148	0.9807	3.31074
7.83316	0.5254	5.06275
7.82199	0.2907	3.5509
6.789	1.3564	3.05507
6.79941	0.0159	2.77108
6.67883	0.4365	2.92504
6.81456	0.8466	3.64769
6.80789	0.5156	2.72897
5.14341	1.9694	1.90488
5.61057	1.2204	2.48001
5.4077	0.536	6.08113
5.40207	0.8019	6.09916
9.2352	0.4305	6.30199
9.23581	0.5987	6.32542

Input	Product	Undesirable Output
9.45428	0.8535	6.03229
9.45201	2.5215	1.45271
3.88559	0.8659	0.801706
3.27368	1.0083	0.657145
3.06077	0.1003	2.59498
2.91952	0.522	0.843789
Input t= 45	Product t= 45	Undesirable Output t= 45
7.05115	0.1026	4.37551
6.6619	0.9837	3.24919
7.3169	1.6289	4.51706
7.71288	0.0368	3.71354
7.54044	0.6426	5.1738
7.42634	0.2415	4.12277
7.32859	1.0659	3.76882
7.17844	1.9344	1.6908
7.18958	0.9114	1.75702
6.48936	0.2656	1.43811
6.30481	0.463	2.40366
6.04689	0.5672	3.08173
8.51903	0.5178	2.13735
9.18056	0.6752	1.60354
9.38105	0.8167	2.78384
7.79965	0.3381	1.44512
6.915	1.4498	2.24848
6.19447	1.5667	1.5887
8.75487	0.241	1.86526
9.08857	3.3096	2.87809
9.23062	0.2084	2.21886
9.25295	2.7329	2.78649
8.51524	1.3196	1.77986
8.79331	1.249	2.70191
8.97585	1.7043	4.58643
9.06545	2.5204	3.02336

Input	Product	Undesirable Output
8.14929	0.8733	2.22923
8.10112	2.2456	1.97256
8.1775	2.6662	2.38724
8.28409	1.3831	3.03271
8.46524	1.7141	2.00408
6.91727	0.2603	1.92286
5.6196	1.0093	1.86825
6.95719	2.7657	6.04797
7.0776	3.0316	6.13892
10.9001	1.7992	6.19445
11.0041	2.8284	6.36697
11.243	1.3762	6.13088
10.9611	0.2918	1.41785
5.06607	1.3638	0.814041
6.15848	1.2214	1.42833
5.86195	2.1294	2.91265
6.13918	1.7077	2.3621
5.28189	2.2297	1.5507
Input t= 46	Product t= 46	Undesirable Output t= 46
7.18326	1.2815	3.96794
7.93743	2.3678	3.44431
7.39993	0.2448	3.86521
6.75217	1.4209	3.20784
6.82031	0.7415	4.23011
7.02622	1.1426	3.59446
6.54566	0.3182	3.37217
6.29056	0.5503	1.29927
6.28737	0.4727	1.62215
5.0113	1.6497	1.34652
5.09132	0.9211	1.49896
6.25535	0.8169	2.33809
10.5936	1.9019	1.94944
9.30787	2.0593	1.26483

Input	Product	Undesirable Output
9.27281	0.5674	1.77679
6.74275	1.046	1.51431
6.28089	0.0657	1.78574
9.04949	0.1826	2.18349
9.17652	1.6251	1.77061
8.22268	1.9255	1.87999
8.23619	1.1757	2.16553
8.20793	1.3488	2.25112
7.96423	0.0645	1.97451
7.8485	0.1351	2.1548
7.90135	0.3202	3.71556
7.93494	1.1363	2.33933
7.11812	0.5108	2.07539
7.13078	0.8615	2.00678
7.00422	1.2821	1.92234
6.82906	0.001	2.40545
6.80932	0.33	1.93914
6.03198	1.1238	2.11185
6.52869	0.3748	1.89799
5.32635	1.3816	5.92156
5.31124	1.6475	5.93992
9.83674	0.4151	5.95829
9.83073	1.4443	6.02463
9.80723	0.0079	5.95816
9.82311	1.6759	0.276086
5.31552	0.0203	0.947202
4.78791	0.1627	0.965953
3.44623	0.7453	1.6958
3.28539	0.3236	2.33802
4.43106	0.8456	1.55301
5.28368	1.3841	1.22271
Input t= 47	Product t= 47	Undesirable Output t= 47
7.21912	1.1085	4.96247

Input	Product	Undesirable Output
7.99198	2.1948	4.08887
7.42286	0.4178	4.74548
6.77184	1.2479	3.87118
6.84768	0.5685	4.66662
7.0521	0.9696	4.45777
6.56168	0.1452	4.18274
6.31072	0.7233	2.08479
6.30705	0.2997	2.59873
5.03777	1.4767	1.88359
5.12677	0.7481	2.08255
6.27639	0.6439	3.49621
10.659	1.7289	3.06006
9.32168	1.8863	1.84885
9.27951	0.3944	2.35484
6.75796	0.873	1.55982
6.31408	0.2387	2.90413
9.12893	0.3556	2.88893
9.19564	1.4521	2.79564
8.23479	2.0985	2.17851
8.24389	1.0027	3.05783
8.2168	1.5218	3.25965
7.99082	0.1085	2.35296
7.86427	0.0379	3.12395
7.91238	0.4932	4.77235
7.9423	1.3093	3.32711
7.13373	0.3378	2.96208
7.14845	1.0345	2.72719
7.01564	1.4551	2.76372
6.84095	0.172	3.43657
6.81388	0.503	2.6637
6.03818	0.9508	1.96971
6.58656	0.2018	2.44565
5.3401	1.5546	6.03389

Input	Product	Undesirable Output
5.31975	1.8205	6.03172
9.84108	0.5881	6.21325
9.83137	1.6173	6.20946
9.80585	0.1651	5.97752
9.8319	1.5029	1.18886
5.37512	0.1527	0.840926
4.7986	0.0103	0.379202
3.47134	0.9183	2.21212
3.29142	0.4966	1.00071
4.44013	1.0186	0.394426
5.39419	1.2111	1.65341
0.1329	0.173	1.34501
Input t= 48	Product t= 48	Undesirable Output t= 48
7.28783	1.9541	3.91438
8.08346	3.0404	3.30002
7.49719	0.4278	3.89583
6.80754	2.0935	3.23454
6.88835	1.4141	4.40826
7.10667	1.8152	3.59434
6.61231	0.9908	3.34555
6.35667	0.1223	1.26239
6.3527	1.1453	1.47312
5.07185	2.3223	1.27695
5.16665	1.5937	1.66778
6.3737	1.4895	2.34125
10.7525	2.5745	1.79314
9.38724	2.7319	1.25432
9.3405	1.24	1.97463
6.79242	1.7186	1.4902
6.3624	0.6069	1.70417
9.24507	0.49	1.93638
9.27072	2.2977	1.60359
8.26443	1.2529	2.11508

Input	Product	Undesirable Output
8.2705	1.8483	2.02556
8.24018	0.6762	2.22131
8.02674	0.7371	1.87055
7.89073	0.8077	2.13561
7.93552	0.3524	3.77705
7.96518	0.4637	2.35814
7.16424	1.1834	1.96144
7.18026	0.1889	1.8774
7.04358	0.6095	1.90271
6.85569	0.6736	2.39922
6.82365	0.3426	1.83294
6.09984	1.7964	2.08694
6.67825	1.0474	1.80172
5.36842	0.709	5.93547
5.34458	0.9749	5.97403
9.85434	0.2575	5.97856
9.84212	0.7717	6.0806
9.80494	0.6805	5.99588
9.83793	2.3485	0.58341
5.46111	0.6929	0.928871
4.85724	0.8353	1.13753
3.49582	0.0727	1.97628
3.30338	0.349	2.46908
4.5391	0.173	1.64695
5.54419	2.0567	0.985448
0.260901	0.6726	0.31169
0.162005	0.8456	1.50547
Input t= 49	Product t= 49	Undesirable Output t= 49
14.4657	0.4138	4.58103
14.8769	1.5001	3.55179
14.4835	1.1125	4.55859
14.1023	0.5532	3.70415
14.1397	0.1262	4.90273

Input	Product	Undesirable Output
13.2338	0.2749	4.20563
14.1645	0.5495	3.88036
14.8815	1.418	1.69607
14.8799	0.395	2.01594
15.5686	0.782	1.43726
15.5983	0.0534	2.1289
16.0401	0.0508	3.18123
12.8287	1.0342	2.46066
10.9119	1.1916	1.51647
10.8745	0.3003	2.48656
11.9761	0.1783	1.2534
12.814	0.9334	2.43515
14.447	1.0503	2.10076
12.9765	0.7574	2.18015
12.2483	2.7932	2.47482
12.1727	0.308	2.49711
12.1518	2.2165	2.90226
11.5308	0.8032	1.88254
11.4401	0.7326	2.78905
11.2726	1.1879	4.6127
11.2139	2.004	3.06616
11.3108	0.3569	2.45189
11.3203	1.7292	2.19171
11.4432	2.1498	2.43589
11.6016	0.8667	3.12384
11.5847	1.1977	2.17428
11.6821	0.2561	1.75993
12.2331	0.4929	1.98301
11.7782	2.2493	5.98852
11.7685	2.5152	6.03994
12.7167	1.2828	6.1531
12.718	2.312	6.25019
12.7134	0.8598	6.01082

Input	Product	Undesirable Output
12.7353	0.8082	1.05454
12.7357	0.8474	0.103962
12.4986	0.705	0.739518
14.2681	1.613	2.51339
15.028	1.1913	1.69452
15.3465	1.7133	0.856485
15.7008	0.5164	0.724556
14.7099	0.8677	0.997585
14.709	0.6947	0.92925
14.7085	1.5403	0.947492
Input t= 50	Product t= 50	Undesirable Output t= 50
16.9751	0.4601	3.98396
17.2977	1.5464	3.40392
16.9797	1.0662	3.90793
16.6653	0.5995	3.23489
16.6891	0.0799	4.31023
15.9249	0.3212	3.62327
16.9437	0.5032	3.38682
17.7085	1.3717	1.28953
17.7076	0.3487	1.58937
18.2935	0.8283	1.30789
18.3124	0.0997	1.56444
18.6804	0.0045	2.3816
14.6293	1.0805	1.92647
13.0865	1.2379	1.2504
13.0677	0.254	1.85855
14.5568	0.2246	1.47035
15.441	0.8871	1.79038
16.7302	1.004	2.10114
15.5635	0.8037	1.73618
14.9858	2.7469	1.96388
14.9142	0.3543	2.1351
14.8971	2.1702	2.27133

Input	Product	Undesirable Output
14.3716	0.7569	1.92479
14.3148	0.6863	2.17597
14.1497	1.1416	3.78022
14.0917	1.9577	2.3779
14.1599	0.3106	2.05383
14.165	1.6829	1.96798
14.3101	2.1035	1.933
14.4926	0.8204	2.43726
14.4874	1.1514	1.90877
14.5502	0.3024	2.06955
14.989	0.4466	1.86003
14.719	2.203	5.92313
14.7158	2.4689	5.94868
15.485	1.2365	5.96917
15.4936	2.2657	6.04663
15.5019	0.8135	5.96507
15.5042	0.8545	0.366434
15.4574	0.8011	0.87531
15.305	0.6587	0.965867
17.1937	1.5667	1.80866
17.9935	1.145	2.32515
18.243	1.667	1.52338
18.4701	0.5627	1.11052
17.7303	0.8214	0.112883
17.732	0.6484	1.34201
17.734	1.494	0.220386
3.23526	0.0463	0.91738

C-7. Set Memberships for the Second 50 Production Plans

Dg	Dd	Di	TE	TI	TU	SE	SI
Dg t= 2	Dd t= 2	Di t= 2	TE t= 2	TI t= 2	TU t= 2	SE t= 2	SI t= 2
0	0	1	0	0	1	0	0
Dg t= 3	Dd t= 3	Di t= 3	TE t= 3	TI t= 3	TU t= 3	SE t= 3	SI t= 3
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
Dg t= 4	Dd t= 4	Di t= 4	TE t= 4	TI t= 4	TU t= 4	SE t= 4	SI t= 4
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	1	0	0	0	1	0	1
Dg t= 5	Dd t= 5	Di t= 5	TE t= 5	TI t= 5	TU t= 5	SE t= 5	SI t= 5
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	1
Dg t= 6	Dd t= 6	Di t= 6	TE t= 6	TI t= 6	TU t= 6	SE t= 6	SI t= 6
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	1
0	0	1	0	0	1	1	1
0	0	1	0	0	1	0	0
Dg t= 7	Dd t= 7	Di t= 7	TE t= 7	TI t= 7	TU t= 7	SE t= 7	SI t= 7
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	1
0	0	1	0	0	1	0	1
0	0	1	0	0	1	0	0
0	1	0	0	0	1	0	0
Dg t= 8	Dd t= 8	Di t= 8	TE t= 8	TI t= 8	TU t= 8	SE t= 8	SI t= 8
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0

Dg	Dd	Di	TE	TI	TU	SE	SI
0	0	1	0	0	1	0	1
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	1
0	0	1	0	0	1	0	1
0	0	1	0	0	1	0	0
Dg t= 9	Dd t= 9	Di t= 9	TE t= 9	TI t= 9	TU t= 9	SEt= 9	SI t= 9
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
1	0	0	0	0	1	0	0
Dg t= 10	Dd t= 10	Di t= 10	TE t= 10	TI t= 10	TU t= 10	SEt= 10	SI t= 10
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	1	0
0	0	1	0	0	1	1	0
Dg t= 11	Dd t= 11	Di t= 11	TE t= 11	TI t= 11	TU t= 11	SEt= 11	SI t= 11
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0

Dg	Dd	Di	TE	TI	TU	SE	SI
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
Dg t= 12	Dd t= 12	Di t= 12	TE t= 12	TI t= 12	TU t= 12	SEt= 12	SI t= 12
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	1	0
0	0	1	0	0	1	1	0
0	0	1	0	0	1	1	0
0	0	1	0	0	1	1	0
0	0	1	0	0	1	0	0
Dg t= 13	Dd t= 13	Di t= 13	TE t= 13	TI t= 13	TU t= 13	SEt= 13	SI t= 13
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	1	0
0	0	1	0	0	1	1	0
0	0	1	0	0	1	1	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	1	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
Dg t= 14	Dd t= 14	Di t= 14	TE t= 14	TI t= 14	TU t= 14	SEt= 14	SI t= 14
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0

Dg	Dd	Di	TE	TI	TU	SE	SI
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
Dg t= 15	Dd t= 15	Di t= 15	TE t= 15	TI t= 15	TU t= 15	SEt= 15	SI t= 15
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	1
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
Dg t= 16	Dd t= 16	Di t= 16	TE t= 16	TI t= 16	TU t= 16	SEt= 16	SI t= 16
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	1
0	0	1	0	0	1	0	1

Dg	Dd	Di	TE	TI	TU	SE	SI
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	1
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
Dg t= 17	Dd t= 17	Di t= 17	TE t= 17	TI t= 17	TU t= 17	SE t= 17	SI t= 17
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	1
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	1
0	0	1	0	0	1	0	1
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
1	0	0	0	0	1	0	0
Dg t= 18	Dd t= 18	Di t= 18	TE t= 18	TI t= 18	TU t= 18	SE t= 18	SI t= 18
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	1
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	1
0	0	1	0	0	1	0	0

Dg	Dd	Di	TE	TI	TU	SE	SI
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	1
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	1
Dg t= 19	Dd t= 19	Di t= 19	TE t= 19	TI t= 19	TU t= 19	SE t= 19	SI t= 19
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	1	0	0	0	1	0	0
Dg t= 20	Dd t= 20	Di t= 20	TE t= 20	TI t= 20	TU t= 20	SE t= 20	SI t= 20
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	1
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	1

Dg	Dd	Di	TE	TI	TU	SE	SI
0	0	1	0	0	1	0	1
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	1
0	0	1	0	0	1	0	1
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	1
0	0	1	0	0	1	0	1
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	1	0	0	0	1	0	1
0	1	0	0	0	1	0	0
0	0	1	0	0	1	0	0
Dg t= 21	Dd t= 21	Di t= 21	TE t= 21	TI t= 21	TU t= 21	SEt= 21	SI t= 21
0	0	1	0	0	1	1	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	1	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0

Dg	Dd	Di	TE	TI	TU	SE	SI
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
Dg t= 22	Dd t= 22	Di t= 22	TE t= 22	TI t= 22	TU t= 22	SE t= 22	SI t= 22
0	0	1	0	0	1	1	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
Dg t= 23	Dd t= 23	Di t= 23	TE t= 23	TI t= 23	TU t= 23	SE t= 23	SI t= 23
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	1
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0

Dg	Dd	Di	TE	TI	TU	SE	SI
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	1	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	1	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	1	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
Dg t= 24	Dd t= 24	Di t= 24	TE t= 24	TI t= 24	TU t= 24	SEt= 24	SI t= 24
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	1	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0

Dg	Dd	Di	TE	TI	TU	SE	SI
0	0	1	0	0	1	0	0
0	0	1	0	0	1	1	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
1	0	0	0	0	1	0	0
Dg t= 25	Dd t= 25	Di t= 25	TE t= 25	TI t= 25	TU t= 25	SE t= 25	SI t= 25
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	1	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	1
Dg t= 26	Dd t= 26	Di t= 26	TE t= 26	TI t= 26	TU t= 26	SE t= 26	SI t= 26
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0

Dg	Dd	Di	TE	TI	TU	SE	SI
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	1
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	1
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	1
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	1
0	0	1	0	0	1	0	1
0	0	1	0	0	1	0	1
Dg t= 27	Dd t= 27	Di t= 27	TE t= 27	TI t= 27	TU t= 27	SEt= 27	SI t= 27
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0

Dg	Dd	Di	TE	TI	TU	SE	SI
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	1	0
Dg t= 28	Dd t= 28	Di t= 28	TE t= 28	TI t= 28	TU t= 28	SE t= 28	SI t= 28
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	1	0
0	0	1	0	0	1	1	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	1	0
0	0	1	0	0	1	0	0

Dg	Dd	Di	TE	TI	TU	SE	SI
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	1	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	1	0
0	0	1	0	0	1	1	0
0	0	1	0	0	1	1	0
1	0	0	0	0	1	0	0
Dg t= 29	Dd t= 29	Di t= 29	TE t= 29	TI t= 29	TU t= 29	SEt= 29	SI t= 29
0	0	1	0	0	1	0	0
0	0	1	0	0	1	1	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	1	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	1	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	1	0
0	0	1	0	0	1	1	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	1	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	1	0
0	0	1	0	0	1	1	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	1	0

Dg	Dd	Di	TE	TI	TU	SE	SI
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
Dg t= 30	Dd t= 30	Di t= 30	TE t= 30	TI t= 30	TU t= 30	SE t= 30	SI t= 30
0	0	1	0	0	1	0	0
0	0	1	0	0	1	1	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	1	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	1	0
0	0	1	0	0	1	1	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	1	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	1	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	1	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	1	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	1	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	1	0
0	0	1	0	0	1	0	0

Dg	Dd	Di	TE	TI	TU	SE	SI
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
Dg t= 32	Dd t= 32	Di t= 32	TE t= 32	TI t= 32	TU t= 32	SEt= 32	SI t= 32
0	0	1	0	0	1	0	0
0	0	1	0	0	1	1	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	1	0
0	0	1	0	0	1	1	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	1	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	1	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	1	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	1	0
0	0	1	0	0	1	1	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	1	0
0	0	1	0	0	1	1	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
1	0	0	0	0	1	1	0

Dg	Dd	Di	TE	TI	TU	SE	SI
1	0	0	0	0	1	1	0
0	0	1	0	0	1	0	0
Dg t= 33	Dd t= 33	Di t= 33	TE t= 33	TI t= 33	TU t= 33	SE t= 33	SI t= 33
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	1	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	1	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	1	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0

Dg	Dd	Di	TE	TI	TU	SE	SI
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
Dg t= 34	Dd t= 34	Di t= 34	TE t= 34	TI t= 34	TU t= 34	SE t= 34	SI t= 34
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	1	0
0	0	1	0	0	1	1	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	1	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	1	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	1	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0

Dg	Dd	Di	TE	TI	TU	SE	SI
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
Dg t= 35	Dd t= 35	Di t= 35	TE t= 35	TI t= 35	TU t= 35	SEt= 35	SI t= 35
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	1	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	1	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	1	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0

Dg	Dd	Di	TE	TI	TU	SE	SI
0	0	1	0	0	1	0	0
0	0	1	0	0	1	1	0
0	0	1	0	0	1	1	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
1	0	0	0	0	1	0	0
1	0	0	0	0	1	0	0
Dg t= 37	Dd t= 37	Di t= 37	TE t= 37	TI t= 37	TU t= 37	SE t= 37	SI t= 37
0	0	1	0	0	1	0	0
0	0	1	0	0	1	1	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	1	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	1	0
0	0	1	0	0	1	1	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	1	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	1	0
0	0	1	0	0	1	1	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	1	0
0	0	1	0	0	1	1	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	1	0
0	0	1	0	0	1	1	0
0	0	1	0	0	1	1	0
0	0	1	0	0	1	1	0

Dg	Dd	Di	TE	TI	TU	SE	SI
0	0	1	0	0	1	1	0
0	0	1	0	0	1	1	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	1	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	1
0	0	1	0	0	1	0	0
1	0	0	0	0	1	0	0
1	0	0	0	0	1	0	0
1	0	0	0	0	1	0	0
Dg t= 38	Dd t= 38	Di t= 38	TE t= 38	TI t= 38	TU t= 38	SEt= 38	SI t= 38
0	0	1	0	0	1	0	0
0	0	1	0	0	1	1	0
0	0	1	0	0	1	1	0
0	0	1	0	0	1	1	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	1	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	1	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0

Dg	Dd	Di	TE	TI	TU	SE	SI
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	1
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
Dg t= 40	Dd t= 40	Di t= 40	TE t= 40	TI t= 40	TU t= 40	SEt= 40	SI t= 40
0	0	1	0	0	1	0	0
0	0	1	0	0	1	1	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	1	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	1	0

Dg	Dd	Di	TE	TI	TU	SE	SI
0	0	1	0	0	1	1	0
0	0	1	0	0	1	1	0
0	0	1	0	0	1	1	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	1	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	1	0
0	0	1	0	0	1	1	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	1	0
0	0	1	0	0	1	1	0
0	0	1	0	0	1	0	1
0	0	1	0	0	1	0	1
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	1
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	1
0	0	1	0	0	1	0	1
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	1
0	0	1	0	0	1	0	1
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
Dg t= 41	Dd t= 41	Di t= 41	TE t= 41	TI t= 41	TU t= 41	SE t= 41	SI t= 41
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0

Dg	Dd	Di	TE	TI	TU	SE	SI
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	1	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	1	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	1	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	1	0

Dg	Dd	Di	TE	TI	TU	SE	SI
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	1	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	1	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	1	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	1	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	1	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	1	0
0	0	1	0	0	1	0	0

Dg	Dd	Di	TE	TI	TU	SE	SI
0	0	1	0	0	1	1	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	1	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	1
0	0	1	0	0	1	0	1
0	0	1	0	0	1	0	1
Dg t= 46	Dd t= 46	Di t= 46	TE t= 46	TI t= 46	TU t= 46	SEt= 46	SI t= 46
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	1	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0

Dg	Dd	Di	TE	TI	TU	SE	SI
0	0	1	0	0	1	1	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
Dg t= 48	Dd t= 48	Di t= 48	TE t= 48	TI t= 48	TU t= 48	SE t= 48	SI t= 48
0	0	1	0	0	1	0	0
0	0	1	0	0	1	1	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	1	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	1	0
0	0	1	0	0	1	1	0
0	0	1	0	0	1	1	0
0	0	1	0	0	1	1	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	1	0
0	0	1	0	0	1	1	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	1	0
0	0	1	0	0	1	1	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	0	0
0	0	1	0	0	1	1	0
0	0	1	0	0	1	1	0

Input	Product	Undesirable Output
5.16006	3.729	2.29344
4.82611	0.9741	1.19614
2.28844	2.8451	0.939808
Input t= 5	Product t= 5	Undesirable Output t= 5
4.80285	1.0326	2.13144
4.25364	1.7223	0.7128
1.4316	0.1487	1.46129
2.32429	2.6964	0.81983
Input t= 6	Product t= 6	Undesirable Output t= 6
4.11412	0.1029	2.31387
4.06416	2.8578	0.89931
0.659959	0.9868	0.65248
2.93507	3.8319	0.435062
1.84814	1.1355	0.818146
Input t= 7	Product t= 7	Undesirable Output t= 7
4.09937	2.449	2.44625
4.08467	0.3059	1.34724
0.499045	1.5651	2.59882
2.63	1.28	2.05687
1.90227	1.4164	1.23889
0.4089	2.5519	2.00716
Input t= 8	Product t= 8	Undesirable Output t= 8
3.95847	1.722	2.38962
3.87938	1.0329	1.89912
3.44713	0.8381	2.46523
4.56616	2.007	1.55127
3.81969	0.6894	1.21343
3.3571	1.8249	1.83692
3.40939	0.727	1.53462
Input t= 9	Product t= 9	Undesirable Output t= 9
3.97174	1.663	2.62507
3.88524	1.0919	1.84585
3.46432	0.7791	3.0348

Input	Product	Undesirable Output
4.6132	2.066	2.38751
3.82494	0.6304	1.60288
3.3643	1.7659	2.41257
3.4266	0.786	0.530017
0.0984588	0.059	1.48355
Input t= 10	Product t= 10	Undesirable Output t= 10
3.94614	1.8821	2.22713
3.87225	0.8728	1.02954
3.42358	0.9982	2.13592
4.49266	1.8469	1.51362
3.80787	0.8495	0.707323
3.3523	1.985	1.51162
3.38985	0.5669	0.557725
0.152295	0.1601	1.14258
0.211957	0.2191	0.901094
Input t= 11	Product t= 11	Undesirable Output t= 11
4.05769	2.8774	3.0591
3.93313	0.1225	2.03009
3.56488	1.9935	3.36779
4.83322	0.8516	3.00832
3.86306	1.8448	2.19859
3.42244	2.9803	2.86424
3.52853	0.4284	1.05796
0.477593	1.1554	2.5658
0.386663	1.2144	1.17283
0.5922	0.9953	1.5922
Input t= 12	Product t= 12	Undesirable Output t= 12
5.40501	1.6434	2.6298
5.4394	1.1115	0.896311
3.92142	0.7595	2.12934
5.08535	2.0856	2.08849
4.37766	0.6108	1.46534
3.77599	1.7463	1.78807

Input	Product	Undesirable Output
3.83269	0.8056	1.26524
5.78566	0.0786	2.45398
5.78434	0.0196	1.77957
5.7897	0.2387	1.33552
5.79769	1.234	1.41794
Input t= 13	Product t= 13	Undesirable Output t= 13
5.38057	0.3807	3.08995
5.43031	2.3742	1.86481
3.88287	0.5032	0.7093
4.96957	3.3483	1.6441
4.36857	0.6519	2.1346
3.76268	0.4836	1.35007
3.79448	2.0683	3.19539
5.7862	1.3413	3.17431
5.78854	1.2823	3.66312
5.78568	1.5014	2.77677
5.81751	2.4967	3.85489
0.235155	1.2627	2.5062
Input t= 14	Product t= 14	Undesirable Output t= 14
6.40323	3.847	3.51138
5.80221	1.0921	2.0621
4.44504	2.9631	3.02571
4.82953	0.118	3.24007
3.87237	2.8144	2.70553
4.6209	3.9499	2.87514
4.69786	1.398	2.35811
6.34698	2.125	3.69795
6.34262	2.184	2.79864
6.35135	1.9649	2.56294
6.326	0.9696	1.93667
3.06646	2.2036	1.25505
3.10025	3.4663	3.16012
Input t= 15	Product t= 15	Undesirable Output t= 15

Input	Product	Undesirable Output
7.60838	0.032	2.69635
7.36623	2.7229	3.01109
5.98364	0.8519	3.03555
4.46417	3.697	2.16352
6.0043	1.0006	2.31872
6.47675	0.1349	2.57586
6.19384	2.417	2.91886
7.95491	1.69	1.43463
8.00727	1.631	2.84041
7.87661	1.8501	2.49596
8.24318	2.8454	3.93795
5.77901	1.6114	3.71708
5.58102	0.3487	3.68461
5.2603	3.815	4.96309
Input t= 16	Product t= 16	Undesirable Output t= 16
6.252	2.6123	1.85723
6.22126	0.1426	1.12343
5.92086	1.7284	2.30642
6.64298	1.1167	1.81817
6.16653	1.5797	1.0577
5.86364	2.7152	1.74269
5.89134	0.1633	0.620989
5.85206	0.8903	1.56151
5.85426	0.9493	0.991929
5.8551	0.7302	0.616859
5.87606	0.2651	1.38237
8.36413	0.9689	1.181
8.36321	2.2316	2.88904
8.79092	1.2347	2.31308
9.99563	2.5803	2.78605
Input t= 17	Product t= 17	Undesirable Output t= 17
6.25561	1.4707	2.79239
6.22262	1.2842	1.99667

Input	Product	Undesirable Output
5.92521	0.5868	0.89046
6.65794	2.2583	1.7292
6.16763	0.4381	2.2332
5.8651	1.5736	1.47017
5.89555	0.9783	3.29384
5.85196	0.2513	3.23196
5.85358	0.1923	3.75096
5.85584	0.4114	2.87172
5.87277	1.4067	3.96224
8.36361	0.1727	2.63817
8.3638	1.09	0.520271
8.78883	2.3763	3.29402
10.0148	1.4387	3.63063
0.0399	1.1416	2.90176
Input t= 18	Product t= 18	Undesirable Output t= 18
6.22034	1.8768	2.02106
6.2355	0.8781	1.54553
5.89847	0.9929	0.941669
6.49681	1.8522	0.624515
6.20323	0.8442	1.27859
5.87129	1.9797	0.770718
5.86341	0.5722	2.46428
5.87989	0.1548	1.91659
5.88971	0.2138	2.79303
5.87297	0.0053	1.93911
5.94499	1.0006	3.38498
8.3853	0.2334	2.40866
8.37002	1.4961	1.534
8.86029	1.9702	3.48866
9.78571	1.8448	2.20776
0.51934	0.7355	2.09308
0.558652	0.4061	1.43588
Input t= 19	Product t= 19	Undesirable Output t= 19

Input	Product	Undesirable Output
6.28153	2.7189	13.7972
6.34717	0.036	13.3013
5.95078	1.835	14.5057
6.28275	1.0101	14.4533
6.32172	1.6863	13.6904
5.9897	2.8218	14.1997
5.91959	0.2699	12.5994
6.03257	0.9969	14.0417
6.05496	1.0559	12.5598
6.00743	0.8368	13.1351
6.1657	0.1585	11.5456
8.50332	1.0755	12.4176
8.46319	2.3382	14.6943
9.00709	1.1281	11.5368
9.42504	2.6869	15.3291
1.42234	0.1066	12.8053
1.46215	1.2482	14.7794
0.907992	0.8421	14.7438
Input t= 20	Product t= 20	Undesirable Output t= 20
7.51868	2.1736	2.83394
7.13069	0.5813	2.90861
6.6923	1.2897	3.9197
5.963	1.5554	3.12191
6.51283	1.141	2.48437
7.03349	2.2765	3.275
6.89309	0.2754	1.72641
7.10533	0.4516	1.75201
7.14062	0.5106	1.24344
7.0523	0.2915	1.90654
7.29959	0.7038	2.16684
9.44943	0.5302	2.95538
9.37928	1.7929	4.59425
8.97434	1.6734	3.93996

Input	Product	Undesirable Output
8.59239	2.1416	2.64029
4.06801	0.4387	1.92204
4.09546	0.7029	4.60443
3.80469	0.2968	3.41891
3.34119	0.5453	12.8548
Input t= 21	Product t= 21	Undesirable Output t= 21
7.87278	0.7839	2.00088
7.50608	3.5388	2.02462
5.78461	1.6678	2.09792
4.899	4.5129	1.22015
5.58137	1.8165	1.36805
6.18055	0.681	1.59786
6.01602	3.2329	2.18176
7.5515	2.5059	0.958406
7.58542	2.4469	2.26549
7.50059	2.666	1.6856
7.73837	3.6613	3.21969
6.44381	2.4273	2.77247
6.33818	1.1646	2.771
5.72831	4.6309	4.00513
5.04414	0.8159	1.02641
9.61174	3.3962	1.94557
9.62365	2.2546	2.7188
9.49991	2.6607	1.28604
9.31784	3.5028	14.7072
8.6883	2.9575	2.48042
Input t= 22	Product t= 22	Undesirable Output t= 22
7.59973	1.5339	2.69203
7.75485	4.2888	2.99931
6.00439	2.4178	3.50907
5.40214	5.2629	2.58565
6.54357	2.5665	2.33549
6.25687	1.431	2.91395

Input	Product	Undesirable Output
6.00016	3.9829	2.38007
7.66342	3.2559	1.18217
7.71131	3.1969	2.10967
7.59604	3.416	2.15595
7.93562	4.4113	3.25993
6.40234	3.1773	3.46745
6.24466	1.9146	4.20959
7.12355	5.3809	4.66825
5.35838	1.5659	1.18474
9.67073	4.1462	2.38467
9.68831	3.0046	4.18574
9.4591	3.4107	2.77919
9.13899	4.2528	14.3803
9.26531	3.7075	1.54472
3.19131	0.75	1.52095
Input t= 23	Product t= 23	Undesirable Output t= 23
6.6655	0.7532	2.11331
6.6204	2.0017	0.946645
4.83747	0.1307	0.868288
5.67045	2.9758	1.27089
5.11401	0.2794	1.33954
4.78108	0.8561	0.890053
4.81344	1.6958	2.2027
6.36468	0.9688	2.47719
6.36368	0.9098	2.682
6.36114	1.1289	1.85011
6.38214	2.1242	2.82287
4.68103	0.8902	1.54694
4.68086	0.3725	1.19563
5.36996	3.0938	2.38394
7.16068	0.7212	3.24138
8.69845	1.8591	1.79339
8.69863	0.7175	1.15304

Input	Product	Undesirable Output
8.71532	1.1236	1.2296
8.81405	1.9657	13.797
9.57051	1.4204	3.60936
4.05758	1.5371	2.22099
4.23981	2.2871	3.48486
Input t= 24	Product t= 24	Undesirable Output t= 24
6.62801	0.5892	2.44374
6.73141	2.1657	1.14686
4.99372	0.2947	2.00192
6.01228	3.1398	2.21806
5.46415	0.4434	1.80037
4.84973	0.6921	1.84966
4.88685	1.8598	1.89924
6.41682	1.1328	2.89812
6.41501	1.0738	2.40753
6.41685	1.2929	1.87266
6.43194	2.2882	2.03078
4.67486	1.0542	0.780079
4.6778	0.2085	2.2181
5.80961	3.2578	1.21715
7.53962	0.5572	3.98769
8.72877	2.0231	1.58487
8.72866	0.8815	2.24827
8.74108	1.2876	2.3515
8.84591	2.1297	12.5715
9.8669	1.5844	3.47786
4.71517	1.3731	2.98467
4.3803	2.1231	3.87615
0.827249	0.164	1.23417
Input t= 25	Product t= 25	Undesirable Output t= 25
4.06932	1.2993	2.33039
4.27816	1.4556	1.59509
5.77011	0.4154	2.89187

Input	Product	Undesirable Output
6.52743	2.4297	2.53068
6.22116	0.2667	1.74932
5.68514	1.4022	2.38818
5.68	1.1497	0.808138
5.15521	0.4227	2.21821
5.16138	0.3637	1.08122
5.14298	0.5828	1.21567
5.22035	1.5781	0.738275
5.78643	0.3441	1.13694
5.76806	0.9186	3.39424
6.76305	2.5477	1.92674
7.96448	1.2673	3.4957
8.21169	1.313	0.774313
8.21407	0.1714	3.42663
8.19281	0.5775	2.81454
8.24826	1.4196	12.0311
9.25921	0.8743	2.04911
8.9835	2.0832	2.70765
8.73079	2.8332	2.92951
7.87804	0.5461	2.27478
7.83857	0.7101	1.59975
Input t= 26	Product t= 26	Undesirable Output t= 26
4.14115	3.3837	2.2091
4.18976	0.6288	1.74909
5.75322	2.4998	2.97116
6.61846	0.3453	2.41594
6.07641	2.3511	1.63105
5.65083	3.4866	2.38568
5.69186	0.9347	0.608212
5.08726	1.6617	1.7398
5.08285	1.7207	0.598312
5.08907	1.5016	0.990328
5.09333	0.5063	1.04793

Input	Product	Undesirable Output
5.74259	1.7403	1.58466
5.75015	3.003	3.56106
6.52599	0.4633	2.54134
8.18658	3.3517	2.99697
8.17573	0.7714	0.681169
8.17499	1.913	3.58287
8.2006	1.5069	2.71738
8.32613	0.6648	12.3873
9.30463	1.2101	1.43053
9.03476	4.1676	2.3264
9.00043	4.9176	2.32224
7.83776	2.6305	2.46877
7.83112	2.7945	2.08145
0.735289	2.0844	0.642701
Input t= 27	Product t= 27	Undesirable Output t= 27
4.0945	0.6424	3.84903
4.17395	2.1125	3.50764
5.71475	0.2415	4.82896
6.48403	3.0866	4.37262
6.0681	0.3902	3.56024
5.63912	0.7453	4.29074
5.65446	1.8066	2.34301
5.09029	1.0796	3.56152
5.09182	1.0206	2.12753
5.08344	1.2397	2.88436
5.12911	2.235	1.55029
5.75115	1.001	2.9181
5.7442	0.2617	5.33791
6.55264	3.2046	3.14047
7.97562	0.6104	4.77599
8.17612	1.9699	2.60428
8.17712	0.8283	5.3858
8.1787	1.2344	4.69477

Input	Product	Undesirable Output
8.26542	2.0765	10.5689
9.19729	1.5312	2.32222
8.92166	1.4263	4.27149
8.83068	2.1763	3.81732
7.83727	0.1108	4.23304
7.83347	0.0532	3.39504
0.459066	0.6569	1.96059
0.357202	2.7413	1.99654
Input t= 28	Product t= 28	Undesirable Output t= 28
4.09809	0.4283	2.99251
4.19524	2.3266	1.99113
5.73705	0.4556	3.21711
6.54684	3.3007	2.6131
6.10124	0.6043	1.82169
5.6473	0.5312	2.61179
5.66906	2.0207	0.691896
5.09569	1.2937	1.75669
5.09574	1.2347	0.393865
5.09132	1.4538	1.13077
5.12661	2.4491	1.02773
5.74798	1.2151	1.8127
5.74466	0.0476	3.82386
6.58507	3.4187	2.73619
8.06078	0.3963	3.14369
8.17896	2.184	1.26889
8.17953	1.0424	3.95399
8.18621	1.4485	3.06438
8.28264	2.2906	12.3312
9.2545	1.7453	1.44294
8.98125	1.2122	2.58523
8.87703	1.9622	2.39771
7.84144	0.3249	2.88105
7.82784	0.1609	2.50896

Input	Product	Undesirable Output
0.463016	0.871	1.18897
0.281461	2.9554	0.872014
0.124187	0.2141	1.99695
Input t= 29	Product t= 29	Undesirable Output t= 29
4.48812	0.7709	2.57534
4.56399	1.984	1.40365
4.83208	0.113	2.40885
5.82407	2.9581	1.69596
5.24402	0.2617	0.977601
4.7097	0.8738	1.772
4.75032	1.6781	0.705129
3.54818	0.9511	0.952819
3.54421	0.8921	0.800238
3.54775	1.1112	0.467802
3.57035	2.1065	1.71025
7.32852	0.8725	1.69208
7.33129	0.3902	3.0703
7.99457	3.0761	2.88414
9.3435	0.7389	2.38427
6.87149	1.8414	1.02189
6.87119	0.6998	3.20395
6.89264	1.1059	2.18398
7.02872	1.948	13.2218
8.17978	1.4027	1.72541
9.18615	1.5548	1.72045
9.11012	2.3048	1.95269
8.0159	0.0177	2.24675
8.00129	0.1817	2.29983
5.1979	0.5284	1.49966
5.16401	2.6128	1.15389
5.1695	0.1285	2.90421
5.16509	0.3426	0.970587
Input t= 30	Product t= 30	Undesirable Output t= 30

Input	Product	Undesirable Output
4.51157	0.6979	2.82492
4.59475	2.057	1.85194
4.87613	0.186	2.97696
5.93124	3.0311	2.29125
5.28917	0.3347	1.5408
4.73139	0.8008	2.34712
4.78625	1.7511	0.666146
3.56659	1.0241	1.32723
3.55862	0.9651	0.365153
3.57237	1.1842	0.885175
3.56691	2.1795	1.39695
7.33072	0.9455	1.88123
7.33886	0.3172	3.62007
8.01858	3.1491	2.94252
9.45834	0.6659	2.72277
6.88089	1.9144	1.18523
6.87961	0.7728	3.74617
6.91353	1.1789	2.75235
7.0709	2.021	12.7698
8.27266	1.4757	1.34486
9.27009	1.4818	2.18718
9.19622	2.2318	2.03103
8.02525	0.0553	2.72487
8.00137	0.1087	2.54956
5.21466	0.6014	1.37382
5.16539	2.6858	0.943099
5.18252	0.0555	2.38885
5.17392	0.2696	0.43963
0.185567	0.073	0.603448
Input t= 31	Product t= 31	Undesirable Output t= 31
4.5884	1.9715	2.54659
4.64354	0.7834	1.0088
4.95299	1.0876	0.917574

Input	Product	Undesirable Output
6.10226	1.7575	0.390538
5.32884	0.9389	0.745993
4.77898	2.0744	0.393129
4.86303	0.4775	1.93637
3.60726	0.2495	1.63284
3.59061	0.3085	2.30116
3.62414	0.0894	1.4208
3.56063	0.9059	2.84332
7.34564	0.3281	1.88126
7.36508	1.5908	1.60184
8.01767	1.8755	3.01479
9.65159	1.9395	2.42884
6.90432	0.6408	1.7835
6.90101	0.5008	1.79131
6.96292	0.0947	0.970701
7.16407	0.7474	14.2523
8.41003	0.2021	3.15567
9.39524	2.7554	1.51205
9.37442	3.5054	2.75197
8.04441	1.2183	1.25849
8.01785	1.3823	2.0842
5.27432	0.6722	2.43628
5.18225	1.4122	2.3721
5.22347	1.3291	4.26812
5.2089	1.5432	2.47558
0.527892	1.2006	1.58491
0.354027	1.2736	2.17966
Input t= 32	Product t= 32	Undesirable Output t= 32
4.5661	0.2214	2.49988
4.78003	2.5335	0.503305
5.06551	0.6625	1.63572
6.2596	3.5076	1.25381
5.58542	0.8112	0.577693

Input	Product	Undesirable Output
4.85534	0.3243	1.09441
4.92285	2.2276	1.0443
3.72219	1.5006	1.59068
3.70991	1.4416	1.50331
3.7346	1.6607	0.701734
3.70251	2.656	1.84275
7.3724	1.422	1.02562
7.38605	0.1593	2.2201
8.25755	3.6256	2.2471
9.75313	0.1894	2.83875
6.95763	2.3909	1.04274
6.9554	1.2493	2.39995
6.99567	1.6554	1.74193
7.17271	2.4975	13.2574
8.58653	1.9522	2.59876
9.55235	1.0053	1.9293
9.3358	1.7553	2.72576
8.09488	0.5318	1.42162
8.01302	0.3678	1.53165
5.24904	1.0779	1.52327
5.21783	3.1623	1.5593
5.24626	0.421	3.31502
5.22574	0.2069	1.61274
0.718651	0.5495	0.971308
0.582591	0.4765	1.43827
0.58472	1.7501	1.01579
Input t= 33	Product t= 33	Undesirable Output t= 33
4.58818	1.903	2.59181
4.79374	0.8519	0.496145
5.087	1.0191	1.75327
6.30652	1.826	1.51425
5.59637	0.8704	0.864654
4.86884	2.0059	1.28679

Input	Product	Undesirable Output
4.94448	0.546	1.04799
3.73364	0.181	1.87428
3.71911	0.24	1.55178
3.74932	0.0209	0.865125
3.70131	0.9744	1.67033
7.3769	0.2596	0.72553
7.39371	1.5223	2.26877
8.25731	1.944	1.92986
9.80698	1.871	3.14378
6.96427	0.7093	1.06033
6.96146	0.4323	2.45569
7.00959	0.0262	1.96066
7.19898	0.8159	12.9902
8.62447	0.2706	2.71581
9.58712	2.6869	2.22453
9.38631	3.4369	2.98219
8.10081	1.1498	1.42899
8.01823	1.3138	1.29881
5.26679	0.6037	1.38802
5.22338	1.4807	1.55163
5.25862	1.2606	3.18723
5.23643	1.4747	1.61771
0.770945	1.1321	1.16172
0.619194	1.2051	1.52933
0.561297	0.0685	1.26436
0.1005	1.6816	0.321451
Input t= 34	Product t= 34	Undesirable Output t= 34
4.79751	1.2387	3.49589
4.82379	1.5162	2.75288
5.61228	0.3548	3.99568
5.49516	2.4903	3.3735
5.96859	0.2061	2.58895
5.78293	1.3416	3.38762

Input	Product	Undesirable Output
5.63406	1.2103	1.42668
5.68469	0.4833	2.33874
5.71955	0.4243	1.0193
5.6251	0.6434	1.88965
5.90091	1.6387	1.27244
5.98989	0.4047	2.45998
5.89339	0.858	4.59892
6.5085	2.6083	3.18238
6.24017	1.2067	3.62007
9.32562	1.3736	1.92765
9.33629	0.232	4.71839
9.20946	0.6381	3.80679
9.05998	1.4802	11.86
9.33096	0.9349	1.36881
7.68674	2.0226	3.2065
7.46929	2.7726	2.68325
7.65211	0.4855	3.6258
7.75486	0.6495	3.13705
4.24641	0.0606	1.64877
4.50418	2.145	1.34291
4.30393	0.5963	1.50516
4.36923	0.8104	0.781471
5.36406	0.4678	1.70302
5.45966	0.5408	1.10471
5.64305	0.7328	3.24991
5.67011	1.0173	2.39079
5.72191	0.6643	2.37341
Input t= 35	Product t= 35	Undesirable Output t= 35
4.40679	1.9937	2.92555
4.25309	0.7612	0.981369
5.31605	1.1098	2.14021
5.93807	1.7353	2.1503
5.49989	0.9611	1.56684

Input	Product	Undesirable Output
5.31642	2.0966	1.83616
5.32931	0.4553	1.41479
5.11006	0.2717	2.57084
5.11133	0.3307	1.91981
5.09751	0.1116	1.47359
5.14813	0.8837	1.5325
5.40765	0.3503	0.328045
5.39885	1.613	2.48403
5.84549	1.8533	1.21086
7.37423	1.9617	3.85547
8.99598	0.6186	1.43345
8.99709	0.523	2.67707
9.00408	0.1169	2.51795
9.07865	0.7252	12.4247
9.67263	0.1799	3.13524
8.11548	2.7776	2.91863
8.29552	3.5276	3.62915
7.25014	1.2405	1.65317
7.33946	1.4045	0.949556
3.75069	0.6944	1.38579
3.66695	1.39	1.80996
3.64516	1.3513	3.06028
3.66775	1.5654	1.8999
4.73049	1.2228	1.77326
4.75966	1.2958	1.97186
4.80674	0.0222	1.89259
4.92286	1.7723	1.05478
4.93692	0.0907	0.733997
2.24647	0.755	2.54701
Input t= 36	Product t= 36	Undesirable Output t= 36
4.36674	0.6458	2.58566
4.69668	2.1091	1.02359
5.69172	0.2381	2.23545

Input	Product	Undesirable Output
6.70849	3.0832	1.72939
6.2541	0.3868	0.934521
5.51731	0.7487	1.65616
5.54383	1.8032	0.492095
5.31754	1.0762	1.47487
5.31343	1.0172	0.922524
5.31212	1.2363	0.43376
5.33958	2.2316	1.36358
5.45521	0.9976	1.12176
5.45588	0.2651	2.83
6.75918	3.2012	2.30057
8.24048	0.6138	2.86854
9.10165	1.9665	0.819601
9.10191	0.8249	2.98519
9.10403	1.231	2.20811
9.197	2.0731	12.8754
10.3592	1.5278	2.09593
8.92399	1.4297	2.07222
8.52328	2.1797	2.49978
7.39061	0.1074	1.94762
7.27358	0.0566	1.78819
3.64704	0.6535	1.15735
3.70772	2.7379	1.08569
3.70456	0.0034	2.76931
3.67985	0.2175	0.998361
4.73307	0.1251	0.589355
4.72585	0.0521	0.867857
4.75741	1.3257	1.5434
4.6698	0.4244	0.614723
4.68052	1.2572	0.661478
3.05231	0.5929	1.77612
1.84182	1.3479	1.1902
Input t= 37	Product t= 37	Undesirable Output t= 37

Input	Product	Undesirable Output
4.38551	0.4286	2.83056
4.70349	2.3263	1.84025
5.70812	0.4553	2.98016
6.76136	3.3004	2.30663
6.25823	0.604	1.54834
5.52311	0.5315	2.35334
5.56006	2.0204	0.636057
5.31747	1.2934	1.36936
5.31108	1.2344	0.341728
5.31534	1.4535	0.884784
5.327	2.4488	1.34779
5.45267	1.2148	1.84796
5.45942	0.0479	3.61869
6.74977	3.4184	2.89977
8.32306	0.3966	2.76747
9.10215	2.1837	1.17036
9.10178	1.0421	3.74593
9.11249	1.4482	2.76761
9.21939	2.2903	12.7253
10.3978	1.745	1.36658
8.96979	1.2125	2.22142
8.5943	1.9625	2.07728
7.39157	0.3246	2.71757
7.27334	0.1606	2.52082
3.66652	0.8707	1.33612
3.70238	2.9551	0.919617
3.71291	0.2138	2.35331
3.68481	0.0003	0.395168
4.73187	0.3423	0.622375
4.71957	0.2693	0.050467
4.74062	1.5429	2.19031
4.6583	0.2072	1.42942
4.66599	1.4744	1.51031

Input	Product	Undesirable Output
3.16692	0.8101	1.08105
1.86193	1.5651	1.93817
0.1421	0.2172	0.849525
Input t= 38	Product t= 38	Undesirable Output t= 38
5.68994	0.791	2.51262
5.89279	1.9639	1.29523
7.41799	0.0929	1.39964
8.21109	2.938	0.533811
7.81155	0.2416	0.720607
7.29417	0.8939	0.837463
7.3204	1.658	1.82884
6.59581	0.931	1.15618
6.59108	0.872	2.08693
6.59286	1.0911	1.28249
6.60514	2.0864	2.83213
8.59443	0.8524	2.11737
8.59785	0.4103	2.09628
9.39781	3.056	3.32751
10.5686	0.759	1.95811
8.93766	1.8213	1.73619
8.93743	0.6797	2.23975
8.94858	1.0858	1.10941
9.0542	1.9279	14.3467
10.1789	1.3826	2.79465
11.4131	1.5749	1.1124
11.1754	2.3249	2.25988
10.2924	0.0378	1.68241
10.2266	0.2018	2.4225
6.90848	0.5083	2.44054
6.91856	2.5927	2.23712
6.92256	0.1486	4.15976
6.91081	0.3627	2.28731
5.65459	0.0201	1.32721

Input	Product	Undesirable Output
5.64841	0.0931	1.92748
5.668	1.1805	0.533517
5.62096	0.5696	1.13411
5.6279	1.112	1.4449
6.24481	0.4477	3.0301
5.70778	1.2027	2.15628
5.4752	0.1452	1.48686
5.47419	0.3624	1.94911
Input t= 39	Product t= 39	Undesirable Output t= 39
5.74212	2.9221	2.4903
5.92205	0.1672	0.475523
7.46189	2.0382	1.55273
8.32999	0.8069	1.17157
7.83173	1.8895	0.529883
7.31792	3.025	1.0091
7.36384	0.4731	1.12179
6.60982	1.2001	1.58383
6.60035	1.2591	1.5736
6.61317	1.04	0.74954
6.59356	0.0447	1.93085
8.60102	1.2787	1.07915
8.61415	2.5414	2.14414
9.39111	0.9249	2.29448
10.7382	2.8901	2.80378
8.94966	0.3098	1.09514
8.94784	1.4514	2.32651
8.9809	1.0453	1.66501
9.12162	0.2032	13.3403
10.2863	0.7485	2.64965
11.511	3.706	1.88593
11.3189	4.456	2.72814
10.3025	2.1689	1.36849
10.2345	2.3329	1.5489

Input	Product	Undesirable Output
6.94658	1.6228	1.59931
6.92381	0.4616	1.62849
6.9461	2.2797	3.40086
6.92981	2.4938	1.69065
5.66723	2.1512	1.01377
5.65046	2.2242	1.50246
5.64776	0.9506	0.928001
5.61209	2.7007	0.0893613
5.61269	1.0191	0.379733
6.39915	1.6834	2.47008
5.73861	0.9284	1.10453
5.49391	2.2763	0.694519
5.48369	2.4935	1.49569
0.35625	2.1311	1.06547
Input t= 40	Product t= 40	Undesirable Output t= 40
5.78905	1.1045	2.94869
5.94123	1.6504	2.29213
7.48775	0.2206	3.23051
8.38168	2.6245	2.41245
7.83267	0.0719	1.7997
7.3391	1.2074	2.58175
7.39506	1.3445	1.2701
6.62669	0.6175	1.05891
6.61378	0.5585	0.895643
6.63129	0.7776	1.28495
6.59525	1.7729	2.0288
8.61423	0.5389	2.4903
8.63278	0.7238	3.91606
9.37505	2.7425	3.60179
10.814	1.0725	2.29078
8.96523	1.5078	1.63667
8.96261	0.3662	4.02302
9.00811	0.7723	2.85025

Input	Product	Undesirable Output
9.16686	1.6144	13.2343
10.3287	1.0691	1.07002
11.5499	1.8884	1.99916
11.3982	2.6384	1.4784
10.3098	0.3513	3.09241
10.2468	0.5153	3.11152
6.97812	0.1948	1.95673
6.9346	2.2792	1.40351
6.96626	0.4621	2.76668
6.94858	0.6762	1.02875
5.68471	0.3336	0.901805
5.66354	0.4066	0.673927
5.6485	0.867	2.36868
5.62559	0.8831	1.87302
5.62289	0.7985	2.04577
6.47541	0.1342	1.38719
5.75112	0.8892	2.58589
5.5188	0.4587	1.41243
5.50389	0.6759	0.721706
0.571071	0.3135	1.98299
0.247447	1.8176	1.91475
Input t= 41	Product t= 41	Undesirable Output t= 41
5.80291	1.9289	4.26228
5.95074	0.826	2.1408
7.49919	1.045	2.78057
8.40675	1.8001	2.54516
7.83951	0.8963	2.18745
7.3468	2.0318	2.45285
7.40643	0.5201	2.20523
6.6329	0.2069	2.63749
6.61913	0.2659	2.43093
6.63874	0.0468	2.13897
6.59668	0.9485	2.57432

Input	Product	Undesirable Output
8.61826	0.2855	2.21859
8.63863	1.5482	3.18687
9.37624	1.9181	2.92153
10.8478	1.8969	3.85749
8.97008	0.6834	2.61153
8.96715	0.4582	3.58254
9.01676	0.0521	3.15064
9.18203	0.79	13.2175
10.3511	0.2447	3.47969
11.5703	2.7128	3.22256
11.4271	3.4628	3.68888
10.3141	1.1757	2.91509
10.2507	1.3397	2.85809
6.98888	0.6296	2.76495
6.9392	1.4548	2.80111
6.9743	1.2865	3.9106
6.95577	1.5006	2.24489
5.6915	1.158	1.98046
5.66834	1.231	2.17547
5.64911	0.0426	2.18159
5.6284	1.7075	1.77854
5.62451	0.0259	1.77452
6.50785	0.6902	2.78863
5.76137	0.0648	1.97843
5.52715	1.2831	1.80545
5.51052	1.5003	2.16543
0.635204	1.1379	2.23248
0.301019	0.9932	1.79463
0.0675	0.8244	2.51122
Input t= 42	Product t= 42	Undesirable Output t= 42
6.04685	0.4699	4.46065
5.99899	2.285	2.66271
7.31752	0.414	3.59335

Input	Product	Undesirable Output
7.62088	3.2591	3.15123
7.51742	0.5627	2.59184
7.35639	0.5728	3.12536
7.32464	1.9791	2.09182
6.99156	1.2521	2.66672
6.99844	1.1931	2.08928
6.96439	1.4122	2.23902
7.06365	2.4075	2.24688
8.07921	1.1735	2.54851
8.05334	0.0892	4.09444
8.45306	3.3771	3.22252
9.15984	0.4379	3.97115
8.22527	2.1424	2.66702
8.23007	1.0008	4.42261
8.18884	1.4069	3.75833
8.19004	2.249	12.6266
8.76216	1.7037	2.95078
9.28737	1.2538	3.48758
9.30037	2.0038	3.4833
8.72983	0.2833	3.57453
8.80043	0.1193	3.30922
7.05393	0.8294	2.64987
7.08172	2.9138	2.57513
7.03303	0.1725	3.24439
7.05291	0.0416	1.78166
7.55497	0.301	1.94671
7.58871	0.228	1.82383
7.65054	1.5016	2.85089
7.6982	0.2485	2.20975
7.71681	1.4331	2.20079
7.52634	0.7688	2.04816
7.40806	1.5238	2.38268
7.61609	0.1759	1.90137

Input	Product	Undesirable Output
7.63473	0.0413	1.81112
8.80885	0.3211	2.74148
8.85735	2.4522	2.25998
8.87465	0.6346	2.10552
8.8869	1.459	1.11281
Input t= 43	Product t= 43	Undesirable Output t= 43
6.16517	2.0974	5.02724
6.01972	0.6575	3.45841
7.43384	1.2135	4.59007
8.12777	1.6316	4.17156
7.52411	1.0648	3.48327
7.3733	2.2003	4.10469
7.43547	0.3516	2.59243
6.95392	0.3754	3.52218
6.94018	0.4344	2.48014
6.95668	0.2153	2.95992
6.91227	0.78	2.22477
8.02666	0.454	3.04797
8.04998	1.7167	5.06949
8.33202	1.7496	3.38355
9.98553	2.0654	4.87503
8.20047	0.5149	3.19338
8.19702	0.6267	5.35938
8.2694	0.2206	4.73856
8.45468	0.6215	11.4822
9.26426	0.0762	3.17346
9.7734	2.8813	4.4098
10.0243	3.6313	4.14938
8.71005	1.3442	4.38565
8.76876	1.5082	3.80163
7.1374	0.7981	2.87444
7.01165	1.2863	2.87681
7.04893	1.455	2.67302

Input	Product	Undesirable Output
7.04732	1.6691	2.08824
7.51176	1.3265	2.72377
7.50769	1.3995	2.35183
7.49083	0.1259	3.89202
7.58073	1.876	3.05809
7.57717	0.1944	2.96346
8.0397	0.8587	1.91556
7.43323	0.1037	2.91828
7.59807	1.4516	2.60946
7.58505	1.6688	2.32439
8.77201	1.3064	3.79447
8.75213	0.8247	3.13054
8.73401	0.9929	2.69067
8.73336	0.1685	2.23737
1.6957	1.6275	1.25935
Input t= 44	Product t= 44	Undesirable Output t= 44
6.12832	1.0106	4.26496
6.3812	1.7443	2.29886
7.7246	0.1267	3.01652
8.68955	2.7184	2.63375
8.15237	0.022	2.21984
7.54099	1.1135	2.60805
7.5971	1.4384	2.10592
7.13997	0.7114	2.44339
7.12822	0.6524	2.22977
7.14727	0.8715	2.07105
7.11131	1.8668	2.50872
8.08491	0.6328	2.38733
8.10527	0.6299	3.49344
9.08115	2.8364	3.17334
10.5754	0.9786	3.67139
8.33685	1.6017	2.58055
8.33388	0.4601	3.85789

Input	Product	Undesirable Output
8.3786	0.8662	3.25439
8.55215	1.7083	13.2099
9.96747	1.163	3.17645
10.4419	1.7945	3.13132
10.1187	2.5445	3.40878
8.86333	0.2574	3.13657
8.73608	0.4214	3.08328
7.0909	0.2887	2.73764
7.07449	2.3731	2.67813
7.10708	0.3682	3.73546
7.08242	0.5823	2.02244
7.54665	0.2397	1.81672
7.52417	0.3127	1.93564
7.51182	0.9609	2.30496
7.45333	0.7892	1.86566
7.45088	0.8924	1.90423
8.26675	0.2281	2.5035
7.70413	0.9831	2.19133
7.39554	0.3648	1.76171
7.38384	0.582	1.93099
8.65115	0.2196	2.24346
8.63482	1.9115	1.89039
8.63704	0.0939	2.1939
8.63707	0.9183	0.483752
2.55726	0.5407	0.754047
1.98987	1.0868	1.98891
Input t= 45	Product t= 45	Undesirable Output t= 45
6.21007	1.3503	4.74899
6.43702	1.4046	2.71465
7.79387	0.4664	2.21094
8.83853	2.3787	2.69038
8.19364	0.3177	2.95802
7.58785	1.4532	2.48311

Input	Product	Undesirable Output
7.66582	1.0987	3.73175
7.17624	0.3717	3.82282
7.16045	0.3127	4.14487
7.19203	0.5318	3.41807
7.1218	1.5271	4.24442
8.11335	0.2931	3.11423
8.14518	0.9696	2.08102
9.08812	2.4967	3.57491
10.7861	1.3183	4.57673
8.36827	1.262	3.77432
8.36333	0.1204	2.60029
8.43465	0.5265	3.01951
8.65064	1.3686	14.6693
10.1086	0.8233	5.21948
10.5791	2.1342	3.8242
10.3181	2.8842	4.96513
8.89908	0.5971	2.7507
8.7694	0.7611	3.22759
7.16177	0.051	4.12515
7.10817	2.0334	4.29377
7.16139	0.7079	5.77738
7.13172	0.922	4.12199
7.58369	0.5794	3.49535
7.55204	0.6524	3.96314
7.5208	0.6212	2.38863
7.473	1.1289	2.75558
7.46497	0.5527	2.76484
8.42803	0.1116	4.8303
7.7581	0.6434	2.88001
7.44483	0.7045	3.24845
7.42525	0.9217	3.95858
8.68805	0.5593	2.76942
8.65506	1.5718	2.70159

Input	Product	Undesirable Output
8.65041	0.2458	4.27012
8.64719	0.5786	2.33376
2.843	0.8804	3.44655
2.02308	0.7471	4.50017
0.431234	0.3397	2.75056
Input t= 46	Product t= 46	Undesirable Output t= 46
6.45781	2.7718	4.41698
6.07052	0.0169	2.54758
7.46644	1.8879	3.45251
7.90533	0.9572	3.0477
7.32995	1.7392	2.50724
7.50067	2.8747	3.00519
7.55376	0.3228	2.07199
7.08986	1.0498	2.6608
7.07958	1.1088	2.11837
7.08915	0.8897	2.19377
7.05804	0.1056	2.24765
8.21708	1.1284	2.44332
8.23499	2.3911	3.9366
8.04069	1.0752	3.11119
9.66326	2.7398	3.96883
8.32647	0.1595	2.627
8.32379	1.3011	4.27556
8.39789	0.895	3.65646
8.56437	0.0529	12.6778
8.90942	0.5982	3.03765
9.43674	3.5557	3.44861
10.0549	4.3057	3.53011
8.82418	2.0186	3.44635
9.00287	2.1826	3.19308
7.41286	1.4725	2.62604
7.24044	0.6119	2.58237
7.26928	2.1294	3.32271

Input	Product	Undesirable Output
7.28495	2.3435	1.82484
7.73837	2.0009	1.92668
7.75061	2.0739	1.85615
7.74192	0.8003	2.73399
7.9175	2.5504	2.10637
7.91598	0.8688	2.08982
8.06228	1.5331	2.1516
7.50333	0.7781	2.26083
7.97773	2.126	1.84291
7.96797	2.3432	1.84233
9.07187	1.9808	2.65434
9.05901	0.1503	2.1536
9.03704	1.6673	2.16789
9.03752	0.8429	0.924895
2.02925	2.3019	0.196783
1.3214	0.6744	1.38273
3.28628	1.7612	0.606223
3.31818	1.4215	3.25785
Input t= 47	Product t= 47	Undesirable Output t= 47
10.2776	1.4453	4.63055
10.2302	4.2002	3.4736
10.0463	2.3292	3.77762
9.34536	5.1743	3.03447
10.2054	2.4779	2.93767
10.3054	1.3424	3.31213
10.1242	3.8943	3.13976
10.6991	3.1673	2.25662
10.7358	3.1083	3.00083
10.6352	3.3274	2.90305
10.9172	4.3227	3.92337
10.3929	3.0887	3.94734
10.2828	1.826	4.38034
10.4399	5.2923	5.04552

Input	Product	Undesirable Output
8.93414	1.4773	2.68966
12.9387	4.0576	3.49468
12.9539	2.916	4.64368
12.7663	3.3221	3.54631
12.4824	4.1642	14.8673
12.1145	3.6189	3.18573
9.07155	0.6614	2.8226
8.88835	0.0886	2.61071
10.114	2.1985	4.14413
10.3036	2.0345	4.56036
10.6978	2.7446	3.94543
10.9071	4.829	3.5359
10.7449	2.0877	4.81988
10.8011	1.8736	2.97965
11.3729	2.2162	2.48744
11.4625	2.1432	2.64853
11.6246	3.4168	2.93045
11.6559	1.6667	3.03093
11.7022	3.3483	3.27324
9.42084	2.684	3.31682
10.2359	3.439	3.88453
10.6874	2.0911	2.92074
10.7531	1.8739	2.68594
12.2155	2.2363	2.52474
12.3651	4.3674	3.02125
12.4307	2.5498	2.26801
12.4609	3.3742	2.55545
7.311	1.9152	2.44844
8.35121	3.5427	3.46982
8.82256	2.4559	2.2001
9.08976	2.7956	3.95001
8.1463	4.2171	2.48441
Input t= 48	Product t= 48	Undesirable Output t= 48

Input	Product	Undesirable Output
9.08839	0.3685	4.69529
9.23039	3.1234	3.25396
9.27854	1.2524	4.19911
10.0158	4.0975	3.58886
9.60746	1.4011	3.01677
9.1527	0.2656	3.65666
9.18907	2.8175	2.39132
9.47244	2.0905	2.69734
9.46567	2.0315	2.1726
9.47464	2.2506	2.56862
9.4615	3.2459	2.57753
8.92494	2.0119	3.1934
8.93751	0.7492	4.77519
9.7531	4.2155	3.95293
11.0522	0.4005	3.87872
11.9389	2.9808	2.99361
11.9376	1.8392	5.05893
11.9607	2.2453	4.17807
12.0661	3.0874	12.7291
13.0156	2.5421	2.63553
10.2766	0.4154	3.61577
10.0015	1.1654	3.21424
8.83711	1.1217	4.18204
8.73878	0.9577	3.96718
9.49365	1.6678	2.9902
9.48528	3.7522	2.74029
9.50124	1.0109	3.19852
9.48758	0.7968	1.87683
10.0444	1.1394	2.17173
10.0335	1.0664	1.89072
10.0322	2.34	3.35794
10.0007	0.5899	2.76329
10.0011	2.2715	2.81512

Input	Product	Undesirable Output
9.64108	1.6072	1.86759
9.21776	2.3622	3.09783
9.02582	1.0143	2.3389
9.01974	0.7971	1.8924
10.8009	1.1595	3.11046
10.7952	3.2906	2.81495
10.799	1.473	1.91501
10.8004	2.2974	1.96108
6.39322	0.8384	0.942112
6.24891	2.4659	1.34569
6.01762	1.3791	1.50503
6.04806	1.7188	4.25113
6.71231	3.1403	1.1298
6.12283	1.0768	2.1803
Input t= 49	Product t= 49	Undesirable Output t= 49
9.15695	1.1045	4.27364
9.28385	3.8594	2.3535
9.34887	1.9884	2.24876
10.1486	4.8335	2.06479
9.65767	2.1371	2.2093
9.20736	1.0016	2.09533
9.25988	3.5535	2.89336
9.51639	2.8265	2.60021
9.50507	2.7675	3.14373
9.52112	2.9866	2.54536
9.48495	3.9819	3.61428
8.96527	2.7479	2.89173
8.98815	1.4852	2.61193
9.78151	4.9515	3.78354
11.2517	1.1365	3.36591
11.977	3.7168	3.09136
11.9744	2.5752	3.03823
12.0151	2.9813	2.60329

Input	Product	Undesirable Output
12.148	3.8234	14.6188
13.1302	3.2781	4.0206
10.4237	0.3206	2.82728
10.2001	0.4294	3.64358
8.87783	1.8577	2.79704
8.77733	1.6937	3.31499
9.54907	2.4038	3.54497
9.51586	4.4882	3.47685
9.5456	1.7469	5.02236
9.52852	1.5328	3.11735
10.0769	1.8754	2.41599
10.0599	1.8024	2.86222
10.0447	3.076	1.76503
10.0194	1.3259	2.10863
10.0161	3.0075	2.26292
9.77049	2.3432	3.77683
9.26261	3.0982	2.71012
9.05728	1.7503	2.4225
9.0454	1.5331	2.87327
10.8234	1.8955	1.81905
10.805	4.0266	2.0622
10.7992	2.209	2.97636
10.7983	3.0334	1.44249
6.48428	1.5744	2.3562
6.24224	3.2019	3.59512
6.01955	2.1151	1.60762
6.02912	2.4548	1.67486
6.72159	3.8763	2.21337
6.45674	0.3408	2.27516
0.443406	0.736	2.93126
Input t= 50	Product t= 50	Undesirable Output t= 50
9.17008	2.7779	7.54562
9.32058	0.023	6.29365

Input	Product	Undesirable Output
9.38484	1.894	7.51552
10.2032	0.9511	7.34698
9.71767	1.7453	6.59445
9.23484	2.8808	7.14389
9.28672	0.3289	5.53466
9.54362	1.0559	6.88913
9.53243	1.1149	5.4929
9.54854	0.8958	6.04164
9.51315	0.0995	4.57782
8.98578	1.1345	5.49949
9.00832	2.3972	7.81466
9.85552	1.0691	4.93045
11.311	2.7459	8.28728
11.9973	0.1656	5.95263
11.9948	1.3072	8.04958
12.0336	0.9011	7.80647
12.1655	0.059	7.89248
13.1863	0.6043	6.05696
10.4941	3.5618	7.69338
10.221	4.3118	7.43217
8.90709	2.0247	7.03468
8.79038	2.1887	5.96389
9.56048	1.4786	5.26814
9.53477	0.6058	5.55947
9.56404	2.1355	4.07732
9.5455	2.3496	5.15446
10.0931	2.007	6.00036
10.0749	2.08	5.56979
10.0602	0.8064	7.07001
10.0249	2.5565	6.0947
10.0217	0.8749	5.86156
9.80081	1.5392	4.75384
9.29725	0.7842	5.40438

Input	Product	Undesirable Output
9.05748	2.1321	5.68916
9.04578	2.3493	5.52702
10.8275	1.9869	7.11541
10.8094	0.1442	6.17726
10.805	1.6734	6.03524
10.8041	0.849	5.56144
6.52983	2.308	4.90113
6.29252	0.6805	3.7405
6.01326	1.7673	5.51291
6.02361	1.4276	7.32278
6.80195	0.0061	4.95778
6.53109	4.2232	7.2081
0.469024	3.1464	5.04814
0.177541	3.8824	7.00247

C.3 Statistics Analyses Results

The results from the analysis of the Data with SAS are presented in this section.

Correlation Analysis

22 'VAR' Variables: OUTPUT RECOUNT1 RECOUNT2 PERMOUT LABHRS SALHRS INPUT1 INPUT2
 INPUT3 INPUT4 INPUT5 INPUT6 INPUT7 INPUT8 INPUT9 INPUT10
 INPUT11 INPUT12 INPUT13 INPUT14 INPUT15 POWER

Simple Statistics

Variable	N	Mean	Std Dev	Sum	Minimum	Maximum
OUTPUT	100	6.220644	1.253746	622.064400	3.583100	9.267500
RECOUNT1	100	6.220648	1.656391	622.064800	4.056900	18.080400
RECOUNT2	100	6.220641	1.331884	622.064100	0	9.099800
PERMOUT	100	6.220644	1.402197	622.064400	4.106200	10.025100
LABHRS	100	6.220642	1.400450	622.064200	1.379100	8.179800
SALHRS	100	6.220640	1.299837	622.064000	3.087000	8.227300
INPUT1	100	6.220637	1.257426	622.063700	4.598600	9.191600
INPUT2	100	6.220647	1.445965	622.064700	4.379700	10.960000
INPUT3	100	6.220643	1.229297	622.064300	4.584800	9.255200
INPUT4	100	6.220630	1.222165	622.063000	4.302900	8.917100
INPUT5	100	6.220644	1.383317	622.064400	2.797900	8.400500
INPUT6	100	6.220646	1.275582	622.064600	3.993800	9.733400

INPUT7	100	6.220634	1.189905	622.063400	3.643300	8.005700
INPUT8	100	6.220647	1.292721	622.064700	3.676900	9.782800
INPUT9	100	6.220639	1.200815	622.063900	4.239500	9.122000
INPUT10	100	6.220649	1.807414	622.064900	5.671200	13.364300
INPUT11	100	6.220638	1.251969	622.063800	3.451400	8.121600
INPUT12	100	6.220643	1.070651	622.064300	4.938600	7.540200
INPUT13	100	6.220653	1.226698	622.065300	4.040100	9.053700
INPUT14	100	6.220638	1.222383	622.063800	4.320600	9.428200
INPUT15	100	6.220641	1.412809	622.064100	3.444700	10.759800
POWER	100	6.220629	2.133944	622.062900	2.710900	19.547500

Correlation Analysis

Pearson Correlation Coefficients / Prob > |R| under Ho: Rho=0 / N = 100

	OUTPUT	RECOUT1	RECOUT2	PERMOUT	LABHRS	SALHRS	INPUT1	INPUT2
OUTPUT	1.00000 0.0	0.47973 0.0001	-0.04007 0.6922	0.19001 0.0583	0.45134 0.0001	0.21728 0.0299	0.38281 0.0001	0.34382 0.0005
RECOUT1	0.47973 0.0001	1.00000 0.0	-0.46525 0.0001	0.08967 0.3750	0.39307 0.0001	0.31172 0.0016	0.31586 0.0014	0.22714 0.0230
RECOUT2	-0.04007 0.6922	-0.46525 0.0001	1.00000 0.0	0.11584 0.2511	0.12132 0.2292	-0.01410 0.8893	-0.14102 0.1617	-0.05529 0.5848
PERMOUT	0.19001 0.0583	0.08967 0.3750	0.11584 0.2511	1.00000 0.0	0.21849 0.0290	0.18533 0.0649	0.15857 0.1151	0.19189 0.0558
LABHRS	0.45134 0.0001	0.39307 0.0001	0.12132 0.2292	0.21849 0.0290	1.00000 0.0	0.65376 0.0001	0.47489 0.0001	0.41868 0.0001
SALHRS	0.21728 0.0299	0.31172 0.0016	-0.01410 0.8893	0.18533 0.0649	0.65376 0.0001	1.00000 0.0	0.50455 0.0001	0.48726 0.0001

INPUT1	0.38281	0.31586	-0.14102	0.15857	0.47489	0.50455	1.00000	0.73260
	0.0001	0.0014	0.1617	0.1151	0.0001	0.0001	0.0	0.0001
INPUT2	0.34382	0.22714	-0.05529	0.19189	0.41868	0.48726	0.73260	1.00000
	0.0005	0.0230	0.5848	0.0558	0.0001	0.0001	0.0001	0.0
INPUT3	0.38848	0.22965	-0.03803	0.11450	0.43308	0.43738	0.83793	0.73419
	0.0001	0.0215	0.7072	0.2566	0.0001	0.0001	0.0001	0.0001
INPUT4	0.24739	0.17319	-0.08157	0.29038	0.38561	0.43238	0.58469	0.54078
	0.0131	0.0849	0.4198	0.0034	0.0001	0.0001	0.0001	0.0001
INPUT5	0.45898	0.26613	-0.15434	0.06526	0.41532	0.42552	0.63139	0.69877
	0.0001	0.0074	0.1252	0.5188	0.0001	0.0001	0.0001	0.0001
INPUT6	0.26461	0.11720	-0.04808	-0.22126	0.01071	-0.11283	-0.04550	-0.20988
	0.0078	0.2455	0.6348	0.0269	0.9158	0.2637	0.6531	0.0361
INPUT7	0.51937	0.32089	-0.05669	0.30531	0.42699	0.37680	0.57668	0.61151
	0.0001	0.0011	0.5753	0.0020	0.0001	0.0001	0.0001	0.0001
INPUT8	0.42157	0.35154	-0.23352	-0.09426	0.29270	0.23242	0.40708	0.37781
	0.0001	0.0003	0.0194	0.3509	0.0031	0.0200	0.0001	0.0001
INPUT9	0.24357	-0.05334	0.03624	0.16122	0.25551	0.27523	0.21390	0.31926
	0.0146	0.5981	0.7204	0.1091	0.0103	0.0056	0.0326	0.0012

Correlation Analysis

Pearson Correlation Coefficients / Prob > |R| under Ho: Rho=0 / N = 100

	OUTPUT	RECOUT1	RECOUT2	PERMOUT	LABHRS	SALHRS	INPUT1	INPUT2
INPUT10	-0.03485 0.7307	0.15727 0.1181	-0.12696 0.2081	0.45479 0.0001	0.14695 0.1446	0.19139 0.0565	0.11871 0.2395	0.02259 0.8235
INPUT11	0.27020 0.0066	0.13002 0.1973	0.02315 0.8191	0.36687 0.0002	0.37890 0.0001	0.35419 0.0003	0.55297 0.0001	0.44871 0.0001
INPUT12	0.34235 0.0005	0.37905 0.0001	-0.11483 0.2553	-0.03308 0.7439	0.37163 0.0001	0.37885 0.0001	0.71000 0.0001	0.66880 0.0001
INPUT13	0.31050 0.0017	0.07706 0.4460	-0.05550 0.5834	0.03264 0.7472	0.21805 0.0293	0.16534 0.1002	0.40710 0.0001	0.25474 0.0105
INPUT14	0.14219 0.1582	-0.11990 0.2347	0.13992 0.1650	-0.06799 0.5015	-0.03853 0.7035	-0.11600 0.2504	-0.23093 0.0208	-0.10917 0.2796
INPUT15	-0.04099 0.6855	-0.13055 0.1954	0.02422 0.8110	0.42465 0.0001	0.14094 0.1619	0.20623 0.0395	-0.01017 0.9200	0.10745 0.2873
POWER	-0.07415	0.01566	-0.02182	0.02621	0.08584	0.07966	0.16845	0.23784

0.4634 0.8771 0.8294 0.7958 0.3958 0.4308 0.0939 0.0172

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Correlation Analysis

Pearson Correlation Coefficients / Prob > |R| under Ho: Rho=0 / N = 100

	INPUT3	INPUT4	INPUT5	INPUT6	INPUT7	INPUT8	INPUT9	INPUT10
OUTPUT	0.38848 0.0001	0.24739 0.0131	0.45898 0.0001	0.26461 0.0078	0.51937 0.0001	0.42157 0.0001	0.24357 0.0146	-0.03485 0.7307
RECOUT1	0.22965 0.0215	0.17319 0.0849	0.26613 0.0074	0.11720 0.2455	0.32089 0.0011	0.35154 0.0003	-0.05334 0.5981	0.15727 0.1181
RECOUT2	-0.03803 0.7072	-0.08157 0.4198	-0.15434 0.1252	-0.04808 0.6348	-0.05669 0.5753	-0.23352 0.0194	0.03624 0.7204	-0.12696 0.2081
PERMOUT	0.11450 0.2566	0.29038 0.0034	0.06526 0.5188	-0.22126 0.0269	0.30531 0.0020	-0.09426 0.3509	0.16122 0.1091	0.45479 0.0001
LABHRS	0.43308 0.0001	0.38561 0.0001	0.41532 0.0001	0.01071 0.9158	0.42699 0.0001	0.29270 0.0031	0.25551 0.0103	0.14695 0.1446
SALHRS	0.43738 0.0001	0.43238 0.0001	0.42552 0.0001	-0.11283 0.2637	0.37680 0.0001	0.23242 0.0200	0.27523 0.0056	0.19139 0.0565

INPUT1	0.83793	0.58469	0.63139	-0.04550	0.57668	0.40708	0.21390	0.11871
	0.0001	0.0001	0.0001	0.6531	0.0001	0.0001	0.0326	0.2395
INPUT2	0.73419	0.54078	0.69877	-0.20988	0.61151	0.37781	0.31926	0.02259
	0.0001	0.0001	0.0001	0.0361	0.0001	0.0001	0.0012	0.8235
INPUT3	1.00000	0.43699	0.71664	0.05084	0.60548	0.31297	0.34943	-0.07919
	0.0	0.0001	0.0001	0.6154	0.0001	0.0015	0.0004	0.4335
INPUT4	0.43699	1.00000	0.50917	-0.27209	0.59958	0.24728	0.26760	0.32673
	0.0001	0.0	0.0001	0.0062	0.0001	0.0131	0.0071	0.0009
INPUT5	0.71664	0.50917	1.00000	0.17793	0.70188	0.45765	0.44435	0.03805
	0.0001	0.0001	0.0	0.0765	0.0001	0.0001	0.0001	0.7070
INPUT6	0.05084	-0.27209	0.17793	1.00000	0.16954	0.56682	0.20011	-0.20173
	0.6154	0.0062	0.0765	0.0	0.0917	0.0001	0.0459	0.0441
INPUT7	0.60548	0.59958	0.70188	0.16954	1.00000	0.50765	0.52568	-0.01418
	0.0001	0.0001	0.0001	0.0917	0.0	0.0001	0.0001	0.8887
INPUT8	0.31297	0.24728	0.45765	0.56682	0.50765	1.00000	0.33865	0.00258
	0.0015	0.0131	0.0001	0.0001	0.0001	0.0	0.0006	0.9797
INPUT9	0.34943	0.26760	0.44435	0.20011	0.52568	0.33865	1.00000	-0.17156
	0.0004	0.0071	0.0001	0.0459	0.0001	0.0006	0.0	0.0879

Correlation Analysis

Pearson Correlation Coefficients / Prob > |R| under Ho: Rho=0 / N = 100

	INPUT3	INPUT4	INPUT5	INPUT6	INPUT7	INPUT8	INPUT9	INPUT10
INPUT10	-0.07919 0.4335	0.32673 0.0009	0.03805 0.7070	-0.20173 0.0441	-0.01418 0.8887	0.00258 0.9797	-0.17156 0.0879	1.00000 0.0
INPUT11	0.41147 0.0001	0.69593 0.0001	0.42869 0.0001	-0.45420 0.0001	0.52813 0.0001	0.01203 0.9054	0.30236 0.0022	0.22630 0.0236
INPUT12	0.65354 0.0001	0.38760 0.0001	0.59494 0.0001	0.02169 0.8304	0.42935 0.0001	0.37397 0.0001	-0.13916 0.1673	0.22991 0.0214
INPUT13	0.43486 0.0001	0.49231 0.0001	0.60661 0.0001	0.17919 0.0745	0.54306 0.0001	0.25545 0.0103	0.60056 0.0001	-0.19833 0.0479
INPUT14	0.03758 0.7105	-0.04481 0.6580	0.25180 0.0115	0.10699 0.2894	0.21555 0.0313	-0.06380 0.5283	0.51802 0.0001	-0.30362 0.0021
INPUT15	0.02877 0.7763	0.13366 0.1849	-0.06716 0.5067	-0.11485 0.2552	0.20024 0.0458	0.07833 0.4386	0.62146 0.0001	0.07856 0.4372

POWER	0.16508	0.33591	0.24639	-0.10164	0.28978	0.03289	0.19538	0.10137
	0.1007	0.0006	0.0135	0.3143	0.0035	0.7453	0.0514	0.3156

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Correlation Analysis

Pearson Correlation Coefficients / Prob > |R| under Ho: Rho=0 / N = 100

	INPUT11	INPUT12	INPUT13	INPUT14	INPUT15	POWER
OUTPUT	0.27020 0.0066	0.34235 0.0005	0.31050 0.0017	0.14219 0.1582	-0.04099 0.6855	-0.07415 0.4634
RECOUT1	0.13002 0.1973	0.37905 0.0001	0.07706 0.4460	-0.11990 0.2347	-0.13055 0.1954	0.01566 0.8771
RECOUT2	0.02315 0.8191	-0.11483 0.2553	-0.05550 0.5834	0.13992 0.1650	0.02422 0.8110	-0.02182 0.8294
PERMOUT	0.36687 0.0002	-0.03308 0.7439	0.03264 0.7472	-0.06799 0.5015	0.42465 0.0001	0.02621 0.7958
LABHRS	0.37890 0.0001	0.37163 0.0001	0.21805 0.0293	-0.03853 0.7035	0.14094 0.1619	0.08584 0.3958
SALHRS	0.35419	0.37885	0.16534	-0.11600	0.20623	0.07966

	0.0003	0.0001	0.1002	0.2504	0.0395	0.4308
INPUT1	0.55297	0.71000	0.40710	-0.23093	-0.01017	0.16845
	0.0001	0.0001	0.0001	0.0208	0.9200	0.0939
INPUT2	0.44871	0.66880	0.25474	-0.10917	0.10745	0.23784
	0.0001	0.0001	0.0105	0.2796	0.2873	0.0172
INPUT3	0.41147	0.65354	0.43486	0.03758	0.02877	0.16508
	0.0001	0.0001	0.0001	0.7105	0.7763	0.1007
INPUT4	0.69593	0.38760	0.49231	-0.04481	0.13366	0.33591
	0.0001	0.0001	0.0001	0.6580	0.1849	0.0006
INPUT5	0.42869	0.59494	0.60661	0.25180	-0.06716	0.24639
	0.0001	0.0001	0.0001	0.0115	0.5067	0.0135
INPUT6	-0.45420	0.02169	0.17919	0.10699	-0.11485	-0.10164
	0.0001	0.8304	0.0745	0.2894	0.2552	0.3143
INPUT7	0.52813	0.42935	0.54306	0.21555	0.20024	0.28978
	0.0001	0.0001	0.0001	0.0313	0.0458	0.0035
INPUT8	0.01203	0.37397	0.25545	-0.06380	0.07833	0.03289
	0.9054	0.0001	0.0103	0.5283	0.4386	0.7453
INPUT9	0.30236	-0.13916	0.60056	0.51802	0.62146	0.19538
	0.0022	0.1673	0.0001	0.0001	0.0001	0.0514

Correlation Analysis

Pearson Correlation Coefficients / Prob > |R| under Ho: Rho=0 / N = 100

	INPUT11	INPUT12	INPUT13	INPUT14	INPUT15	POWER
INPUT10	0.22630 0.0236	0.22991 0.0214	-0.19833 0.0479	-0.30362 0.0021	0.07856 0.4372	0.10137 0.3156
INPUT11	1.00000 0.0	0.33987 0.0005	0.36630 0.0002	0.09604 0.3419	0.14487 0.1504	0.20175 0.0441
INPUT12	0.33987 0.0005	1.00000 0.0	-0.00162 0.9873	-0.35090 0.0003	-0.34246 0.0005	0.19180 0.0559
INPUT13	0.36630 0.0002	-0.00162 0.9873	1.00000 0.0	0.56922 0.0001	0.03987 0.6937	0.28972 0.0035
INPUT14	0.09604 0.3419	-0.35090 0.0003	0.56922 0.0001	1.00000 0.0	0.11810 0.2419	-0.00788 0.9380
INPUT15	0.14487 0.1504	-0.34246 0.0005	0.03987 0.6937	0.11810 0.2419	1.00000 0.0	-0.08342 0.4093

POWER	0.20175	0.19180	0.28972	-0.00788	-0.08342	1.00000
	0.0441	0.0559	0.0035	0.9380	0.4093	0.0

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Model: MODEL1
 Dependent Variable: OUTPUT

Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Value	Prob>F
Model	21	86.72441	4.12973	4.676	0.0001
Error	78	68.89160	0.88323		
C Total	99	155.61601			

Root MSE	0.93980	R-square	0.5573
Dep Mean	6.22064	Adj R-sq	0.4381
C.V.	15.10777		

Parameter Estimates

Variable	DF	Parameter Estimate	Standard Error	T for H0: Parameter=0	Prob > T
INTERCEP	1	0.167746	2.04294032	0.082	0.9348
RECOUT1	1	0.248881	0.08718014	2.855	0.0055

RECOUT2	1	0.072614	0.10063016	0.722	0.4727
PERMOUT	1	0.220923	0.11883167	1.859	0.0668
LABHRS	1	0.216694	0.10536552	2.057	0.0431
SALHRS	1	-0.204504	0.11262585	-1.816	0.0732
INPUT1	1	0.133028	0.29929292	0.444	0.6579
INPUT2	1	-0.002216	0.21607677	-0.010	0.9918
INPUT3	1	-0.124011	0.22109872	-0.561	0.5765
INPUT4	1	0.107442	0.18815247	0.571	0.5696
INPUT5	1	0.069950	0.19770621	0.354	0.7244
INPUT6	1	0.097344	0.20556633	0.474	0.6372
INPUT7	1	0.108399	0.18127461	0.598	0.5516
INPUT8	1	0.066605	0.14591976	0.456	0.6493
INPUT9	1	0.281028	0.24782538	1.134	0.2603
INPUT10	1	-0.106412	0.09498627	-1.120	0.2660
INPUT11	1	0.003489	0.19748146	0.018	0.9859
INPUT12	1	0.136552	0.27245356	0.501	0.6176
INPUT13	1	-0.112538	0.26808297	-0.420	0.6758
INPUT14	1	0.112926	0.18035704	0.626	0.5331
INPUT15	1	-0.227041	0.15601210	-1.455	0.1496
POWER	1	-0.126117	0.05897978	-2.138	0.0356

Collinearity Diagnostics(intercept adjusted)

Number	Eigenvalue	Condition Index	Var Prop RECOUT1	Var Prop RECOUT2	Var Prop PERMOUT	Var Prop LABHRS	Var Prop SALHRS	Var Prop INPUT1
1	6.81428	1.00000	0.0015	0.0002	0.0005	0.0035	0.0035	0.0010
2	2.74147	1.57659	0.0056	0.0025	0.0002	0.0006	0.0016	0.0005
3	2.41364	1.68025	0.0073	0.0084	0.0226	0.0005	0.0015	0.0001
4	1.62699	2.04653	0.0228	0.0137	0.0152	0.0098	0.0091	0.0003
5	1.30892	2.28167	0.0247	0.1268	0.0006	0.0237	0.0190	0.0005
6	1.00293	2.60660	0.0704	0.0406	0.0093	0.0179	0.0241	0.0000
7	0.96056	2.66347	0.0177	0.0901	0.0028	0.0849	0.0124	0.0021
8	0.83190	2.86204	0.0008	0.0065	0.0635	0.0311	0.0780	0.0008
9	0.64122	3.25992	0.1015	0.0007	0.0968	0.0000	0.0205	0.0010
10	0.56570	3.47070	0.0352	0.0270	0.0004	0.0059	0.0534	0.0007
11	0.48773	3.73784	0.0051	0.0160	0.0338	0.0021	0.0071	0.0215
12	0.35052	4.40912	0.0057	0.0000	0.0684	0.0711	0.1926	0.0072
13	0.29147	4.83519	0.0220	0.0210	0.0000	0.1598	0.3058	0.0009
14	0.25125	5.20779	0.3457	0.3250	0.0381	0.4620	0.0629	0.0065
15	0.22040	5.56039	0.0004	0.0066	0.0958	0.0513	0.0570	0.0098
16	0.15645	6.59957	0.2483	0.1096	0.0126	0.0239	0.0539	0.0144
17	0.10859	7.92160	0.0008	0.0551	0.2234	0.0002	0.0093	0.0577
18	0.08749	8.82519	0.0207	0.0851	0.0106	0.0342	0.0032	0.0001
19	0.07238	9.70301	0.0371	0.0571	0.0686	0.0099	0.0018	0.0233
20	0.04294	12.59733	0.0189	0.0000	0.0654	0.0050	0.0020	0.1531

21 0.02316 17.15311 0.0079 0.0081 0.1714 0.0025 0.0814 0.6987

Number	Var Prop INPUT2	Var Prop INPUT3	Var Prop INPUT4	Var Prop INPUT5	Var Prop INPUT6	Var Prop INPUT7	Var Prop INPUT8	Var Prop INPUT9	Var Prop INPUT10
1	0.0013	0.0017	0.0020	0.0018	0.0000	0.0028	0.0014	0.0005	0.0001
2	0.0003	0.0000	0.0002	0.0004	0.0020	0.0015	0.0004	0.0074	0.0102
3	0.0000	0.0005	0.0029	0.0011	0.0112	0.0000	0.0123	0.0004	0.0076
4	0.0006	0.0016	0.0010	0.0010	0.0066	0.0003	0.0170	0.0018	0.0107
5	0.0021	0.0043	0.0067	0.0002	0.0003	0.0007	0.0000	0.0001	0.0192
6	0.0002	0.0002	0.0013	0.0000	0.0129	0.0029	0.0184	0.0004	0.0222
7	0.0094	0.0045	0.0003	0.0002	0.0068	0.0002	0.0008	0.0023	0.0206
8	0.0002	0.0029	0.0001	0.0028	0.0037	0.0044	0.0000	0.0035	0.0111
9	0.0046	0.0066	0.0446	0.0000	0.0002	0.0121	0.0283	0.0000	0.0277
10	0.0014	0.0070	0.0207	0.0307	0.0000	0.0286	0.0241	0.0031	0.1266
11	0.0160	0.0261	0.0000	0.0060	0.0139	0.0198	0.0396	0.0005	0.0031
12	0.0204	0.0148	0.0426	0.0081	0.0015	0.0145	0.0006	0.0182	0.0366
13	0.0373	0.0002	0.0096	0.0001	0.0343	0.0850	0.0438	0.0010	0.0191
14	0.0006	0.0141	0.0076	0.0452	0.0025	0.0029	0.0040	0.0022	0.0416
15	0.0100	0.0391	0.1474	0.0004	0.0070	0.1051	0.1524	0.0186	0.0035
16	0.0085	0.0292	0.0298	0.1128	0.0395	0.0746	0.2162	0.0776	0.0068
17	0.0008	0.1172	0.2527	0.0260	0.0351	0.4268	0.0604	0.0080	0.1582
18	0.1194	0.0005	0.0089	0.3033	0.0198	0.1060	0.1231	0.2499	0.1336
19	0.0150	0.3834	0.0002	0.1331	0.0299	0.0249	0.0998	0.0000	0.0675
20	0.3146	0.0640	0.0306	0.0014	0.6169	0.0867	0.1558	0.2642	0.0042
21	0.4372	0.2823	0.3908	0.3254	0.1558	0.0003	0.0017	0.3403	0.2699

Output of Boards related to all inputs and undesirable outputs

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Number	Var Prop INPUT11	Var Prop INPUT12	Var Prop INPUT13	Var Prop INPUT14	Var Prop INPUT15	Var Prop POWER
1	0.0013	0.0010	0.0006	0.0000	0.0001	0.0012
2	0.0000	0.0041	0.0041	0.0159	0.0036	0.0001
3	0.0059	0.0018	0.0001	0.0001	0.0088	0.0007
4	0.0028	0.0014	0.0016	0.0021	0.0217	0.0263
5	0.0016	0.0010	0.0036	0.0019	0.0018	0.0463
6	0.0038	0.0013	0.0006	0.0149	0.0006	0.1206
7	0.0001	0.0000	0.0019	0.0094	0.0280	0.0114
8	0.0042	0.0014	0.0003	0.0066	0.0050	0.2434
9	0.0079	0.0005	0.0035	0.0020	0.0000	0.1140
10	0.0223	0.0034	0.0002	0.0258	0.0000	0.0002
11	0.0078	0.0107	0.0289	0.0361	0.0002	0.0042
12	0.0713	0.0122	0.0058	0.0025	0.0166	0.0224
13	0.0689	0.0079	0.0163	0.0031	0.0015	0.0024
14	0.0107	0.0017	0.0018	0.0183	0.0089	0.0005
15	0.0688	0.0078	0.0057	0.0035	0.0805	0.0112
16	0.0092	0.0013	0.0021	0.2083	0.0021	0.0475
17	0.0185	0.0255	0.0430	0.0682	0.0220	0.0260
18	0.0106	0.0196	0.0103	0.0003	0.4536	0.1145
19	0.0205	0.5827	0.0782	0.0873	0.0808	0.0030
20	0.1372	0.3116	0.1258	0.3102	0.0891	0.1973
21	0.5265	0.0031	0.6656	0.1836	0.1749	0.0070

17	6.0166	4.9410	0.344	1.0756	0.874	1.230		**		0.011
18	6.1335	4.4574	0.407	1.6761	0.847	1.979		***		0.041
19	4.3258	6.2657	0.462	-1.9399	0.819	-2.370		****		0.081
20	7.8764	6.4099	0.422	1.4665	0.840	1.746		***		0.035
21	4.7752	5.9330	0.409	-1.1578	0.846	-1.368		**		0.020
22	7.2997	6.0357	0.403	1.2640	0.849	1.489		**		0.023
23	5.8864	6.0537	0.407	-0.1673	0.847	-0.198				0.000
24	5.8158	6.2579	0.376	-0.4421	0.862	-0.513		*		0.002
25	6.2711	6.4709	0.435	-0.1998	0.833	-0.240				0.001
26	7.0872	6.4254	0.377	0.6618	0.861	0.769		*		0.005
27	5.4401	6.0357	0.384	-0.5956	0.858	-0.694		*		0.004
28	6.8124	6.0052	0.389	0.8072	0.855	0.944		*		0.008
29	7.2330	6.2653	0.384	0.9677	0.858	1.128		**		0.012
30	5.9499	6.1416	0.393	-0.1917	0.854	-0.225				0.000
31	6.2809	6.1051	0.399	0.1758	0.851	0.207				0.000
32	4.8271	6.0287	0.513	-1.2016	0.788	-1.525		***		0.045
33	5.5761	5.3692	0.493	0.2069	0.800	0.258				0.001
34	7.3325	6.6502	0.510	0.6823	0.789	0.864		*		0.014
35	7.5984	6.7939	0.504	0.8045	0.793	1.015		**		0.019
36	6.3660	6.7612	0.464	-0.3952	0.818	-0.483				0.003
37	7.3952	7.0024	0.469	0.3928	0.814	0.482				0.004
38	5.9430	6.8148	0.466	-0.8718	0.816	-1.069		**		0.017
39	4.2750	5.2592	0.652	-0.9842	0.677	-1.454		**		0.089
40	5.9306	5.2937	0.415	0.6369	0.843	0.755		*		0.006
41	5.7882	5.8919	0.410	-0.1037	0.846	-0.123				0.000
42	6.6962	6.0021	0.438	0.6941	0.832	0.835		*		0.009
43	6.2745	6.1297	0.413	0.1448	0.844	0.172				0.000
44	6.7965	6.5397	0.459	0.2568	0.820	0.313				0.001

45	4.5668	5.3788	0.518	-0.8120	0.784	-1.036	**		0.021
46	5.9509	5.9591	0.422	-0.00824	0.840	-0.010			0.000
47	5.7779	6.1677	0.433	-0.3898	0.834	-0.467			0.003
48	6.6235	5.8998	0.431	0.7237	0.835	0.866	*		0.009

Output of Boards related to all inputs and undesirable outputs 623
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Obs	Dep Var OUTPUT	Predict Value	Std Err Predict	Std Err Residual	Std Err Residual	Student Residual	-2-1-0 1 2	Cook's D
49	5.0832	5.0433	0.556	0.0399	0.758	0.053		0.000
50	5.1295	4.6190	0.673	0.5105	0.656	0.778	*	0.029
51	5.4205	6.4799	0.521	-1.0594	0.782	-1.354	**	0.037
52	8.1754	7.4868	0.566	0.6886	0.750	0.918	*	0.022
53	6.3044	6.8644	0.380	-0.5600	0.860	-0.651	*	0.004
54	9.1495	6.5639	0.394	2.5856	0.853	3.031	*****	0.089
55	6.4531	7.1484	0.384	-0.6953	0.858	-0.810	*	0.006
56	5.3176	6.7959	0.372	-1.4783	0.863	-1.713	***	0.025
57	7.8695	6.7656	0.385	1.1039	0.857	1.288	**	0.015
58	7.1425	6.4746	0.377	0.6679	0.861	0.776	*	0.005
59	7.0835	6.7681	0.366	0.3154	0.865	0.364		0.001
60	7.3026	6.7354	0.348	0.5672	0.873	0.650	*	0.003
61	8.2979	7.1470	0.367	1.1509	0.865	1.330	**	0.014
62	7.0639	7.3317	0.402	-0.2678	0.849	-0.315		0.001
63	5.8012	7.1328	0.413	-1.3316	0.844	-1.578	***	0.027
64	9.2675	8.3765	0.506	0.8910	0.792	1.125	**	0.023
65	5.4525	5.8532	0.489	-0.4007	0.803	-0.499		0.004

66	8.0328	7.5784	0.421	0.4544	0.840	0.541			*		0.003
67	6.8912	7.6762	0.479	-0.7850	0.808	-0.971		*			0.015
68	7.2973	7.2591	0.458	0.0382	0.821	0.047					0.000
69	8.1394	9.6031	0.819	-1.4637	0.461	-3.178		*****			1.451
70	7.5941	7.2502	0.484	0.3439	0.805	0.427					0.003
71	4.6366	5.5488	0.431	-0.9122	0.835	-1.092		**			0.014
72	3.8866	4.4584	0.477	-0.5718	0.810	-0.706		*			0.008
73	6.1737	6.0647	0.413	0.1090	0.844	0.129					0.000
74	6.0097	6.1357	0.422	-0.1260	0.839	-0.150					0.000
75	6.7198	6.6891	0.448	0.0307	0.826	0.037					0.000
76	8.8042	6.7391	0.438	2.0651	0.831	2.484			****		0.078
77	6.0629	6.8799	0.445	-0.8170	0.828	-0.987		*			0.013
78	5.8488	6.8099	0.446	-0.9611	0.827	-1.162		**			0.018
79	6.1914	6.7658	0.349	-0.5744	0.872	-0.658		*			0.003
80	6.1184	6.8043	0.356	-0.6859	0.870	-0.788		*			0.005
81	7.3920	6.8939	0.367	0.4981	0.865	0.576			*		0.003
82	5.6419	6.8739	0.354	-1.2320	0.870	-1.416		**			0.015
83	7.3235	6.9766	0.359	0.3469	0.869	0.399					0.001
84	6.6592	6.2890	0.433	0.3702	0.834	0.444					0.002
85	7.4142	7.1152	0.424	0.2990	0.839	0.356					0.001
86	6.0663	6.4649	0.402	-0.3986	0.850	-0.469					0.002
87	5.8491	6.3756	0.415	-0.5265	0.843	-0.624		*			0.004
88	6.2115	6.6337	0.443	-0.4222	0.829	-0.509		*			0.003
89	8.3426	6.9521	0.442	1.3905	0.829	1.677			***		0.036
90	6.5250	6.6692	0.476	-0.1442	0.810	-0.178					0.000
91	7.3494	7.4325	0.464	-0.0831	0.817	-0.102					0.000
92	5.8904	6.6728	0.398	-0.7824	0.852	-0.919		*			0.008
93	7.5179	7.1880	0.416	0.3299	0.843	0.391					0.002

94	6.4311	6.5974	0.416	-0.1663	0.843	-0.197				0.000
95	6.7708	6.9111	0.481	-0.1403	0.807	-0.174				0.000
96	8.1923	7.3224	0.452	0.8699	0.824	1.056		**		0.015

Output of Boards related to all inputs and undesirable outputs 624

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Obs	Dep Var OUTPUT	Predict Value	Std Err Predict	Std Err Residual	Std Err Residual	Student Residual	-2	-1	0	1	2	Cook's D
97	3.9752	4.3890	0.583	-0.4138	0.737	-0.562		*				0.009
98	5.0520	5.3432	0.488	-0.2912	0.803	-0.363						0.002
99	4.3160	5.4219	0.484	-1.1059	0.805	-1.373		**				0.031
100	8.1984	6.4571	0.549	1.7413	0.763	2.283			****			0.123

Sum of Residuals 0
Sum of Squared Residuals 68.8916
Predicted Resid SS (Press) 148.2390

Output of Boards related to all inputs and undesirable outputs 625

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Dependent Variable: OUTPUT

Test: Numerator: 0.0060 DF: 1 F value: 0.0067
Denominator: 0.883226 DF: 78 Prob>F: 0.9348