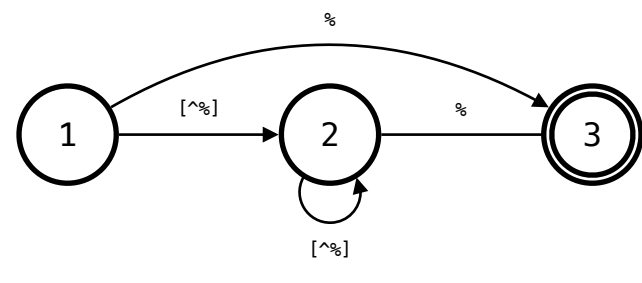


RE(Regular Expression)

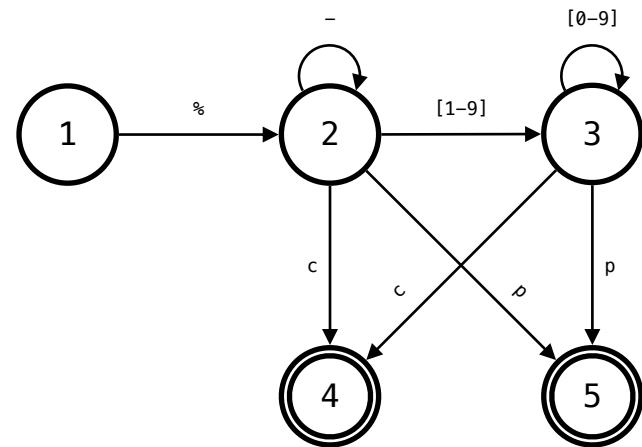
```
WIDTH      =    [1-9][0-9]*
PRECISION  =    \.[0-9]*
```

ASC	=	[^%]*
%	=	%[\-0# +]*{WIDTH}?{PRECISION}?%
X	=	%[\-#]*[0#]*){WIDTH}?{PRECISION}?X
C	=	%-*{WIDTH}?C
d	=	%[\-]*[\-+]*[0]*[0+]*){WIDTH}?{PRECISION}?d
i	=	%[\-]*[\-+]*[0]*[0+]*){WIDTH}?{PRECISION}?i
p	=	%-*{WIDTH}?p
s	=	%-*{WIDTH}?{PRECISION}?s
u	=	%(- 0*){WIDTH}?{PRECISION}?u
x	=	%([\-#]*[0#]*){WIDTH}?{PRECISION}?x

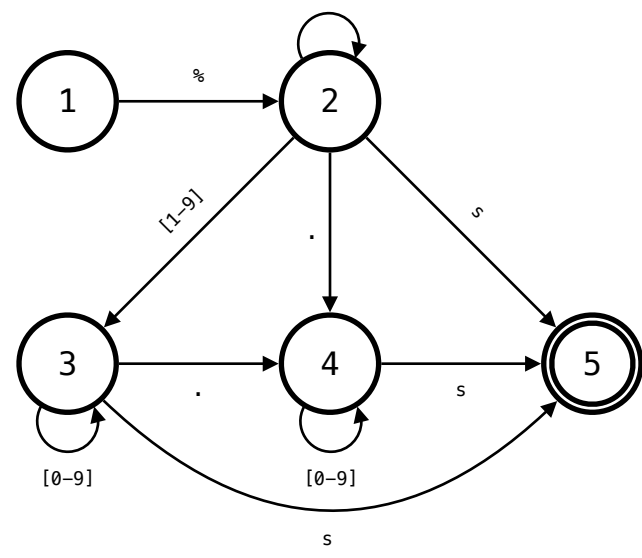
DFA(Deterministic Finite Automata)



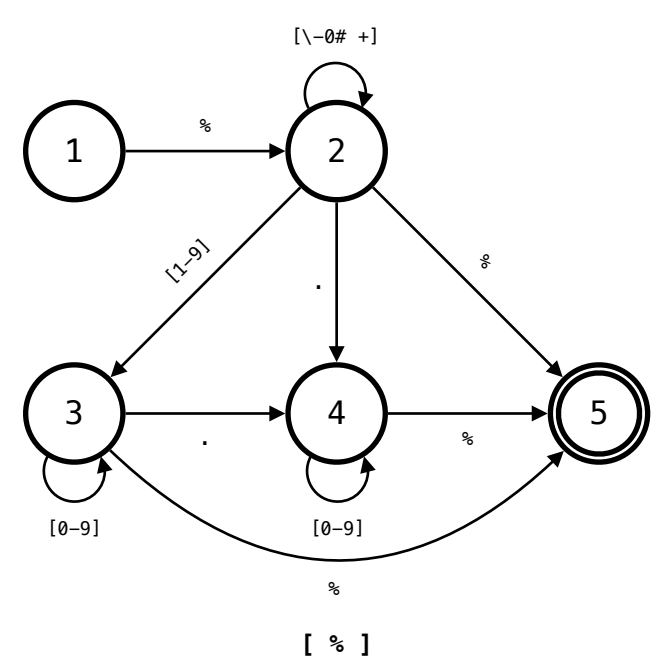
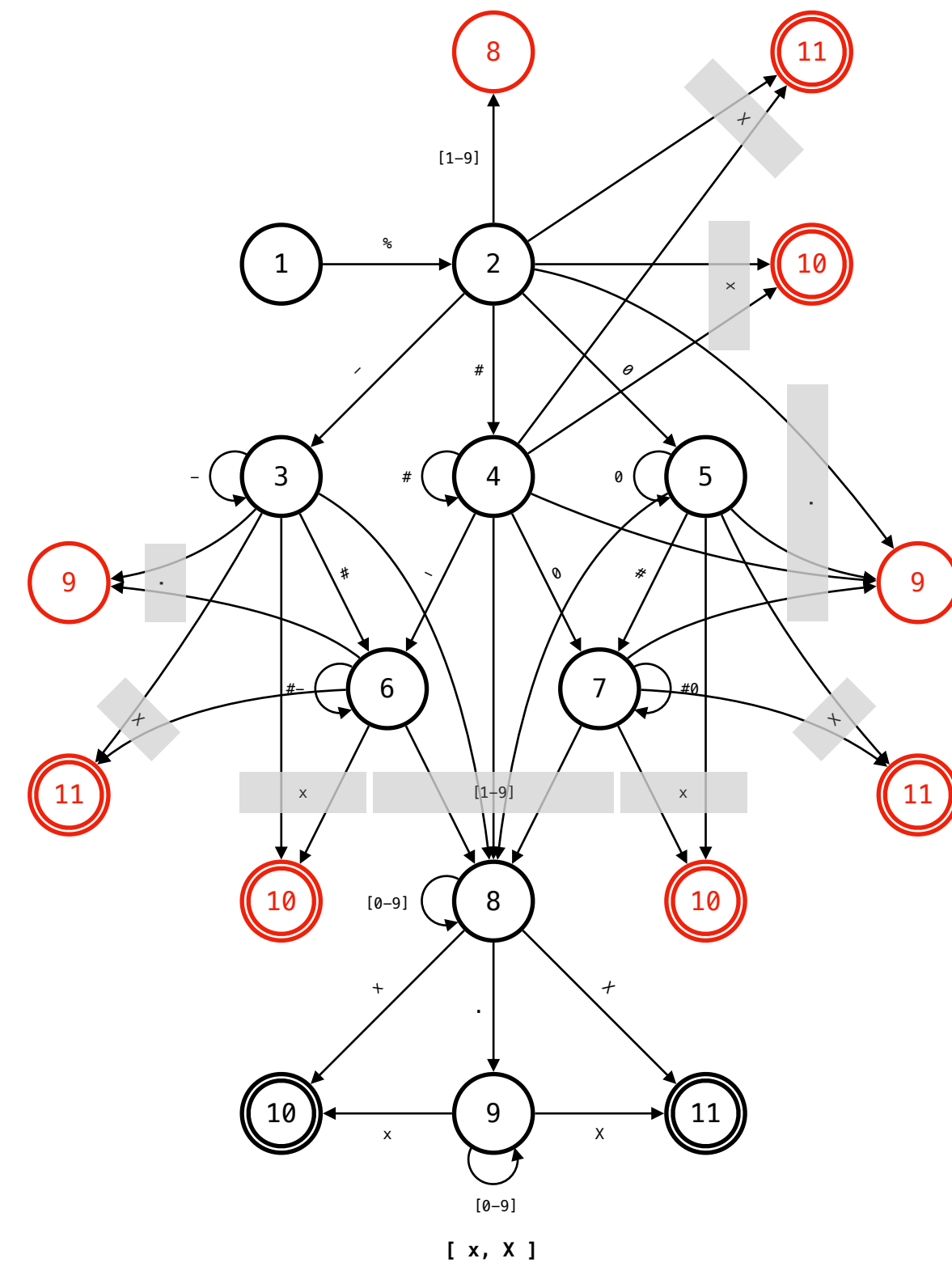
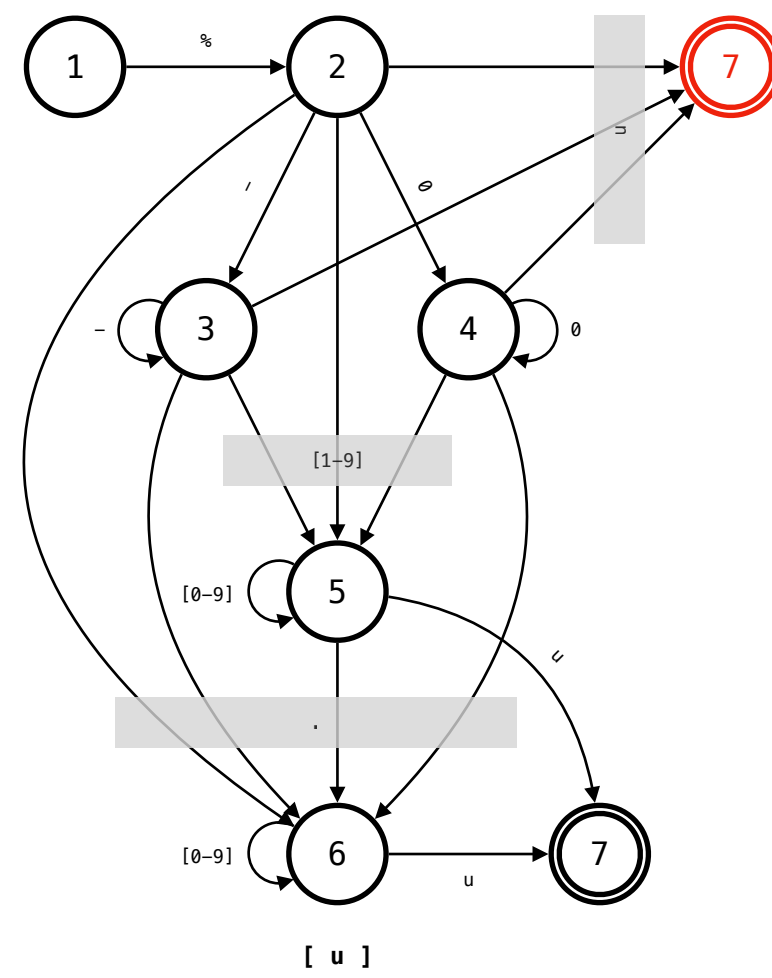
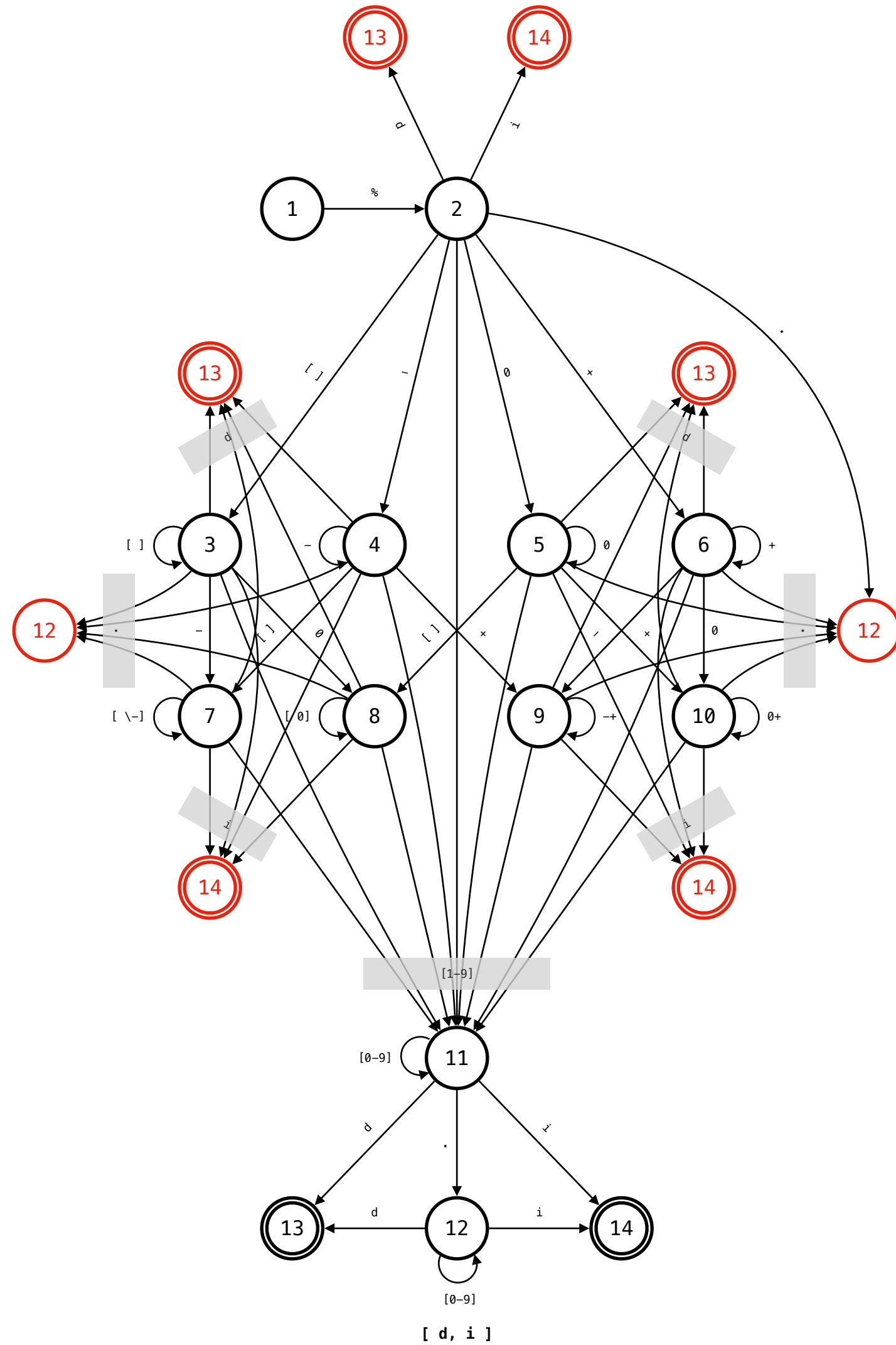
[ASC]



[c , p]



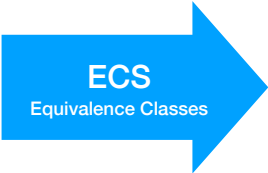
[s]



RE(Regular Expression)

WIDTH = [1-9][0-9]*
PRECISION = \.[0-9]*

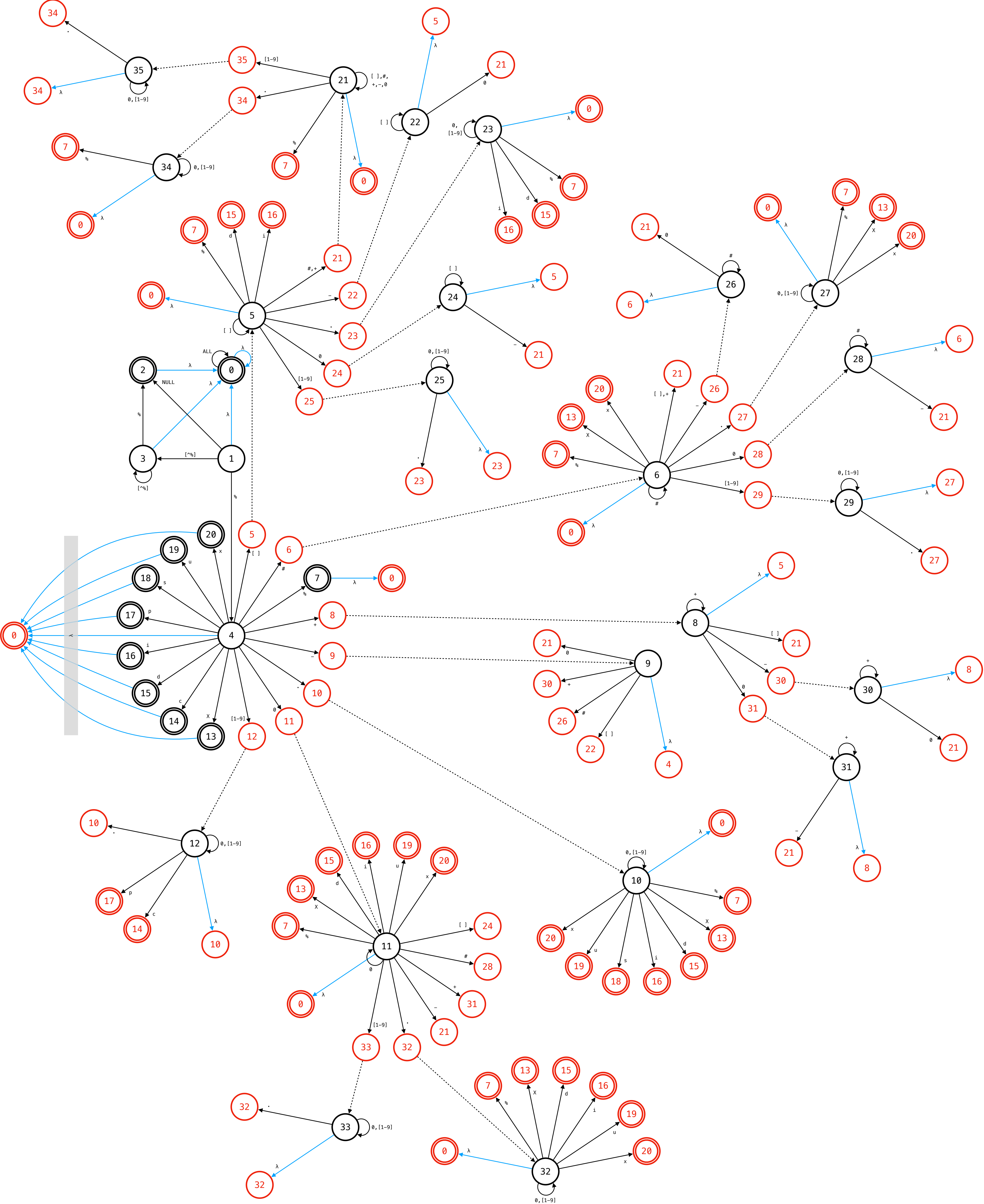
ASC = [%]*
% = %[\-0# +]*{WIDTH}?{PRECISION}?%
X = %([\-#]*|[0#]*)?{WIDTH}?{PRECISION}?X
c = %-*{WIDTH}?c
d = %([\-]*|[\-+]*|[0]*|[0+]*)?{WIDTH}?{PRECISION}?d
i = %([\-]*|[\-+]*|[0]*|[0+]*)?{WIDTH}?{PRECISION}?i
p = %-*{WIDTH}?p
s = %-*{WIDTH}?{PRECISION}?s
u = %(-*|0*)?{WIDTH}?{PRECISION}?u
x = %([\-#]*|[0#]*)?{WIDTH}?{PRECISION}?x



ECS(Equivalence Classes)

	0	1	2	3	4	5	6	7	8	9
0	0	1	1	1	1	1	1	1	1	1
1	1	1	1	1	1	1	1	1	1	1
2	1	1	1	1	1	1	1	1	1	1
3	1	1	2	1	1	3	1	4	1	1
4	1	1	1	5	1	6	7	1	8	9
5	9	9	9	9	9	9	9	9	1	1
6	1	1	1	1	1	1	1	1	1	1
7	1	1	1	1	1	1	1	1	1	1
8	1	1	1	1	1	1	1	1	10	1
9	1	1	1	1	1	1	1	1	1	11
10	12	1	1	1	1	13	1	1	1	1
11	1	1	14	1	1	15	1	16	1	1
12	17	1	1	1	1	1	1	1	1	1
13	1	1	1	1	1	1	1	1	1	1
14	1	1	1	1	1	1	1	1	1	1
15	1	1	1	1	1	1	1	1	1	1
16	1	1	1	1	1	1	1	1	1	1
17	1	1	1	1	1	1	1	1	1	1
18	1	1	1	1	1	1	1	1	1	1
19	1	1	1	1	1	1	1	1	1	1
20	1	1	1	1	1	1	1	1	1	1
21	1	1	1	1	1	1	1	1	1	1
22	1	1	1	1	1	1	1	1	1	1
23	1	1	1	1	1	1	1	1	1	1
24	1	1	1	1	1	1	1	1	1	1
25	1	1	1	1	1	1				

NFA(Non-deterministic Finite Automata)



State Transition Table

	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
				#	%	+	-	.	0		X	c	d	i	p	s	u	x
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1	2	3	3	3	4	3	3	3	3	3	3	3	3	3	3	3	3	3
2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3	2	3	3	3	2	3	3	3	3	3	3	3	3	3	3	3	3	3
4	-	-	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
5	-	-	5	21	7	21	22	23	24	25	-	-	15	16	-	-	-	-
6	-	-	21	6	7	21	26	27	28	29	13	-	-	-	-	-	-	20
7	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
8	-	-	21	-	-	8	30	-	31	-	-	-	-	-	-	-	-	-
9	-	-	22	26	-	30	-	-	21	-	-	-	-	-	-	-	-	-
10	-	-	-	-	7	-	-	-	10	10	13	-	15	16	-	18	19	20
11	-	-	24	28	7	31	21	32	11	33	13	-	15	16	-	-	19	20
12	-	-	-	-	-	-	-	10	12	12	-	14	-	-	17	-	-	-
13	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
14	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
15	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
16	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
17	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
18	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
19	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
20	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
21	-	-	21	21	7	21	21	34	21	35	-	-	-	-	-	-	-	-
22	-	-	22	-	-	-	-	-	21	-	-	-	-	-	-	-	-	-
23	-	-	-	-	7	-	-	-	23	23	-	-	15	16	-	-	-	-
24	-	-	24	-	-	-	21	-	-	-	-	-	-	-	-	-	-	-
25	-	-	-	-	-	-	-	23	25	25	-	-	-	-	-	-	-	-
26	-	-	-	26	-	-	-	-	21	-	-	-	-	-	-	-	-	-
27	-	-	-	-	7	-	-	-	27	27	13	-	-	-	-	-	-	20
28	-	-	-	28	-	-	21	-	-	-	-	-	-	-	-	-	-	-
29	-	-	-	-	-	-	-	27	29	29	-	-	-	-	-	-	-	-
30	-	-	-	-	-	30	-	-	21	-	-	-	-	-	-	-	-	-
31	-	-	-	-	-	31	21	-	-	-	-	-	-	-	-	-	-	-
32	-	-	-	-	7	-	-	-	32	32	13	-	15	16	-	-	19	20
33	-	-	-	-	-	-	-	32	33	33	-	-	-	-	-	-	-	-
34	-	-	-	-	7	-	-	-	34	34	-	-	-	-	-	-	-	-
35	-	-	-	-	-	-	-	34	35	35	-	-	-	-	-	-	-	-



Base Table

	0	1	2	3	4	5	6	7	8	9
0	0	18	0	36	52	68	80	0	90	97
1	99	115	126	0	0	0	0	0	0	0
2	0	139	102	145	124	143	98	151	88	155
3	131	73	161	172	178	176				

Check Table

	0	1	2	3	4	5	6	7	8	9
0	0	0	0	0	0	0	0	0	0	0
1	0	0	0	0	0	0	0	0	1	1
2	1	1	1	1	1	1	1	1	1	1
3	1	1	1	1	1	1	3	3	3	3
4	3	3	3	3	3	3	3	3	3	3
5	3	3	3	3	4	4	4	4	4	4
6	4	4	4	4	4	4	4	4	4	4
7	5	5	5	5	5	5	5	5	31	31
8	5	5	6	6	6	6	6	6	6	6
9	6	28	8	-	28	8	8	6	8	9
10	9	26	9	10	22	9	26	10	10	10
11	22	10	10	-	10	10	10	11	11	11
12	11	11	11	11	11	11	24	11	11	-
13	24	11	11	12	12	12	30	12	-	30
14	12	21	21	21	21	21	21	21	21	23
15	25	25	25	23	23	27	-	23	23	27
16	27	27	29	29	29	32	-	-	27	32
17	32	32	-	32	32	-	-	32	32	33
18	33	33	34	35	35	35	34	34	-	-
19	-	-	-	-	-	-				

Next Table

	0	1	2	3	4	5	6	7	8	9
0	0	0	0	0	0	0	0	0	0	0
1	0	0	0	0	0	0	0	0	2	3
2	3	3	4	3	3	3	3	3	3	3
3	3	3	3	3	3	3	2	3	3	3
4	2	3	3	3	3	3	3	3	3	3
5	3	3	3	3	5	6	7	8	9	10
6	11	12	13	14	15	16	17	18	19	20
7	5	21	7	21	22	23	24	25	31	21
8	15	16	21	6	7	21	26	27	28	29
9	13	28	21	-	21	8	30	20	31	22
10	26	26	30	7	22	21	21	10	10	13
11	21	15	16	-	18	19	20	24	28	7
12	31	21	32	11	33	13	24	15	16	-
13	21	19	20	10	12	12	30	14	-	21
14	17	21	21	7	21	21	34	21	35	7
15	23	25	25	23	23	7	-	15	16	27
16	27	13	27	29	29	7	-	-	20	32
17	32	13	-	15	16	-	-	19	20	32
18	33	33	7	34	35	35	34	34	-	-
19	-	-	-	-	-	-				

ECS(Equivalence Classes)											
	0	1	2	3	4	5	6	7	8	9	
0	0	1	1	1	1	1	1	1	1	1	1
1	1	1	1	1	1	1	1	1	1	1	1
2	1	1	1	1	1	1	1	1	1	1	1
3	1	1	2	1	1	3	1	4	1	1	
4	1	1	1	5	1	6	7	1	8	9	
5	9	9	9	9	9	9	9	9	1	1	
6	1	1	1	1	1	1	1	1	1	1	
7	1	1	1	1	1	1	1	1	1	1	
8	1	1	1	1	1	1	1	1	10	1	
9	1	1	1	1	1	1	1	1	1	11	
10	12	1	1	1	1	13	1	1	1	1	
11	1	1	14	1	1	15	1	16	1	1	
12	17	1	1	1	1	1	1	1	1	1	
13	1	1	1	1	1	1	1	1	1	1	
14	1	1	1	1	1	1	1	1	1	1	
15	1	1	1	1	1	1	1	1	1	1	
16	1	1	1	1	1	1	1	1	1	1	
17	1	1	1	1	1	1	1	1	1	1	
18	1	1	1	1	1	1	1	1	1	1	
19	1	1	1	1	1	1	1	1	1	1	
20	1	1	1	1	1	1	1	1	1	1	
21	1	1	1	1	1	1	1	1	1	1	
22	1	1	1	1	1	1	1	1	1	1	
23	1	1	1	1	1	1	1	1	1	1	
24	1	1	1	1	1	1	1	1	1	1	
25	1	1	1	1	1						

Base Table											
	0	1	2	3	4	5	6	7	8	9	
0	0	18	0	36	52	68	80	0	90	97	
1	99	115	126	0	0	0	0	0	0	0	
2	0	139	102	145	124	143	98	151	88	155	
3	131	73	161	172	178	176					

Check Table											
	0	1	2	3	4	5	6	7	8	9	
0	0	0	0	0	0	0	0	0	0	0	
1	0	0	0	0	0	0	0	0	1	1	
2	1	1	1	1	1	1	1	1	1	1	
3	1	1	1	1	1	1	3	3	3	3	
4	3	3	3	3	3	3	3	3	3	3	
5	3	3	3	3	4	4	4	4	4	4	
6	4	4	4	4	4	4	4	4	4	4	
7	5	5	5	5	5	5	5	5	31	31	
8	5	5	6	6	6	6	6	6	6	6	
9	6	28	8	–	28	8	8	6	8	9	
10	9	26	9	10	22	9	26	10	10	10	
11	22	10	10	–	10	10	10	11	11	11	
12	11	11	11	11	11	11	24	11	11	–	
13	24	11	11	12	12	12	30	12	–	30	
14	12	21	21	21	21	21	21	21	21	23	
15	25	25	25	23	23	27	–	23	23	27	
16	27	27	29	29	29	32	–	–	27	32	
17	32	32	–	32	32	–	–	32	32	33	
18	33	33	34	35	35	35	34	34	–	–	
19	–	–	–	–	–	–					

Def Table											
	0	1	2	3	4	5	6	7	8	9	
0	0	0	0	0	0	0	0	0	5	4	
1	0	0	10	0	0	0	0	0	0	0	
2	0	0	5	0	5	23	6	0	6	27	
3	8	8	0	32	0	34					

Next Table											
	0	1	2	3	4	5	6	7	8	9	
0	0	0	0	0	0	0	0	0	0	0	
1	0	0	0	0	0	0	0	0	2	3	
2	3	3	4	3	3	3	3	3	3	3	
3	3	3	3	3	3	3	2	3	3	3	
4	2	3	3	3	3	3	3	3	3	3	
5	3	3	3	3	5	6	7	8	9	10	
6	11	12	13	14	15	16	17	18	19	20	
7	5	21	7	21	22	23	24	25	31	21	
8	15	16	21	6	7	21	26	27	28	29	
9	13	28	21	–	21	8	30	20	31	22	
10	26	26	30	7	22	21	21	10	10	13	
11	21	15	16	–	18	19	20	24	28	7	
12	31	21	32	11	33	13	24	15	16	–	
13	21	19	20	10	12	12	30	14	–	21	
14	17	21	21	7	21	21	34	21	35	7	
15	23	25	25	23	23	7	–	15	16	27	
16	27	13	27	29	29	7	–	–	20	32	
17	32	13	–	15	16	–	–	19	20	32	
18	33	33	7	34	35	35	34	34	–	–	
19	–	–	–	–	–	–					



ECS(Equivalence Classes)–1											
	0	1	2	3	4	5	6	7	8	9	
0	0	1	1	1	1	1	1	1	1	1	
1	1	1	1	1	1	1	1	1	1	1	
2	1	1	1	1	1	1	1	1	1	1	
3	1	1	2	1	1	3	1	4	1	1	
4	1	1	1	5	1	6	7	1	8	9	
5	9	9	9	9	9	9	9	9	1	1	
6	1	1	1	1	1	1	1	1	1	1	
7	1	1	1	1	1	1	1	1	1	1	
8	1	1	1	1	1	1	1	1	10	1	
9	1	1	1	1	1	1	1	1	1	11	
10	12	1	1	1	1	13	1	1	1	1	
11	1	1	14	1	1	15	1	16	1	1	
12	17	1	1	1	1	1	1	1	1	1	
13	1	1	1	1	1	1	1	1	1	1	
14	1	1	1	1	1	1	1	1	1	1	
15	1	1	1	1	1	1	1	1	1	1	
16	1	1	1	1	1	1	1	1	1	1	
17	1	1	1	1	1	1	1	1	1	1	
18	1	1	1	1	1	1	1	1	1	1	
19	1	1	1	1	1	1	1	1	1	1	
20	1	1	1	1	1	1	1	1	1	1	
21	1	1	1	1	1	1	1	1	1	1	
22	1	1	1	1	1	1	1	1	1	1	
23	1	1	1	1	1	1	1	1	1	1	
24	1	1	1	1	1	1	1	1	1	1	
25	1	1	1	1	1	1					

MECS(Meta-Equivalence Classes)											
	0	1	2	3	4	5	6	7	8	9	
0	0	1	1	1	2	1	1	1	1	1	
1	1	1	1	1	1	1	1	1			

Base Table–1											
	0	1	2	3	4	5	6	7	8	9	
0	0	14	0	15	18	34	46	0	56	63	
1	65	81	92	0	0	0	0	0	0	0	
2	0	105	68	111	90	109	64	117	54	121	
3	97	39	127	138	144	142	132				

Check Table–1											
	0	1	2	3	4	5	6	7	8	9	
0	0	0	0	0	0	0	0	0	0	0	
1	0	0	0	0	0	0	0	0	1	3	
2	4	4	4	4	4	4	4	4	4	4	
3	4	4	4	4	4	4	5	5	5	5	
4	5	5	5	5	31	31	5	5	6	6	
5	6	6	6	6	6	6	6	28	8	–	
6	28	8	8	6	8	9	9	26	9	10	
7	22	9	26	10	10	10	22	10	10	–	
8	10	10	10	11	11	11	11	11	11	11	
9	11	11	24	11	11	–	24	11	11	12	
10	12	12	30	12	–	30	12	21	21	21	
11	21	21	21	21	21	23	25	25	25	23	
12	23	27	–	23	23	27	27	27	29	29	
13	29	32	36	36	27	32	32	32	–	32	
14	32	–	–	32	32	33	33	33	34	35	
15	35	35	34	34	–	–	–	–	–	–	
16	–	–									

Def Table-1											
	0	1	2	3	4	5	6	7	8	9	
0	0	36	0	36	0	0	0	0	5	4	
1	0	0	10	0	0	0	0	0	0	0	
2	0	0	5	0	5	23	6	0	6	27	
3	8	8	0	32	0	34	0				

Next Table-1											
	0	1	2	3	4	5	6	7	8	9	
0	0	0	0	0	0	0	0	0	0	0	
1	0	0	0	0	0	0	0	0	4	2	
2	5	6	7	8	9	10	11	12	13	14	
3	15	16	17	18	19	20	5	21	7	21	
4	22	23	24	25	31	21	15	16	21	6	
5	7	21	26	27	28	29	13	28	21	-	
6	21	8	30	20	31	22	26	26	30	7	
7	22	21	21	10	10	13	21	15	16	-	
8	18	19	20	24	28	7	31	21	32	11	
9	33	13	24	15	16	-	21	19	20	10	
10	12	12	30	14	-	21	17	21	21	7	
11	21	21	34	21	35	7	23	25	25	23	
12	23	7	-	15	16	27	27	13	27	29	
13	29	7	2	3	20	32	32	13	-	15	
14	16	-	-	19	20	32	33	33	7	34	
15	35	35	34	34	-	-	-	-	-	-	
16	-	-									

ECS(Equivalence Classes)

[illegible]

Base Table

	0	1	2	3	4	5	6	7	8	9
0	0	14	0	15	18	34	46	0	56	63
1	65	81	92	0	0	0	0	0	0	0
2	0	105	68	111	90	109	64	117	54	121
3	97	39	127	138	144	142	132			

Def Table

	0	1	2	3	4	5	6	7	8	9
0	0	36	0	36	0	0	0	0	5	4
1	0	0	10	0	0	0	0	0	0	0
2	0	0	5	0	5	23	6	0	6	27
3	8	8	0	32	0	34	0			

Advance Table

[illegible]

Check Table

	0	1	2	3	4	5	6	7	8	9
0	0	0	0	0	0	0	0	0	0	0
1	0	0	0	0	0	0	0	0	1	3
2	4	4	4	4	4	4	4	4	4	4
3	4	4	4	4	4	4	5	5	5	5
4	5	5	5	5	31	31	5	5	6	6
5	6	6	6	6	6	6	6	28	8	–
6	28	8	8	6	8	9	9	26	9	10
7	22	9	26	10	10	10	22	10	10	–
8	10	10	10	11	11	11	11	11	11	11
9	11	11	24	11	11	–	24	11	11	12
10	12	12	30	12	–	30	12	21	21	21
11	21	21	21	21	21	23	25	25	25	23
12	23	27	–	23	23	27	27	27	29	29
13	29	32	36	36	27	32	32	32	–	32
14	32	–	–	32	32	33	33	33	34	35
15	35	35	34	34	–	–	–	–	–	–
16	–	–								

Next Table

	0	1	2	3	4	5	6	7	8	9
0	0	0	0	0	0	0	0	0	0	0
1	0	0	0	0	0	0	0	0	4	2
2	5	6	7	8	9	10	11	12	13	14
3	15	16	17	18	19	20	5	21	7	21
4	22	23	24	25	31	21	15	16	21	6
5	7	21	26	27	28	29	13	28	21	–
6	21	8	30	20	31	22	26	26	30	7
7	22	21	21	10	10	13	21	15	16	–
8	18	19	20	24	28	7	31	21	32	11
9	33	13	24	15	16	–	21	19	20	10
10	12	12	30	14	–	21	17	21	21	7
11	21	21	34	21	35	7	23	25	25	23
12	23	7	–	15	16	27	27	13	27	29
13	29	7	2	3	20	32	32	13	–	15
14	16	–	–	19	20	32	33	33	7	34
15	35	35	34	34	–	–	–	–	–	–
16	–	–								

Command ID Table

	0	1	2	3	4	5	6	7	8	9
0	0	0	0	0	0	0	0	0	0	0
1	0	0	0	0	0	0	0	0	0	1
2	3	4	11	5	6	7	8	9	12	13
3	14	15	16	17	18	19	3	4	11	5
4	6	7	8	9	5	6	14	15	3	4
5	11	5	6	7	8	9	12	4	3	–
6	6	5	6	19	8	3	4	4	5	11
7	3	8	8	10	10	12	8	14	15	–
8	17	18	19	3	4	11	5	6	7	8
9	9	12	3	14	15	–	6	18	19	7
10	9	9	5	13	–	8	16	3	4	11
11	5	6	7	8	9	11	7	9	9	10
12	10	11	–	14	15	10	10	12	7	9
13	9	11	1	2	19	10	10	12	–	14
14	15	–	–	18	19	7	9	9	11	7
15	9	9	10	10	–	–	–	–	–	–
16	–	–								

Command Table

	Name
0	empty
1	set_asc
2	increase_width
3	set_space
4	set_hash
5	set_plus
6	set_minus
7	set_precision
8	set_zero
9	add_width
10	add_precision
11	set_percentage
12	set_X
13	set_c
14	set_d
15	set_i
16	set_p
17	set_s
18	set_u
19	set_x

MECS (Meta-Equivalence Classes)

[illegible]

Class Diagram

