

[13, 17] Trellis Diagram, Cost:

index	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
state 0	0	2	4	4	3	4	2	2	3	3	4	4	5	6	5	6	3	5	5	6
state 1	999	0	2	6	1	4	2	3	3	3	4	4	5	6	5	6	5	3	5	6
state 2	999	999	0	4	1	2	4	2	4	4	4	4	5	5	3	5	6	5	5	6
state 3	999	999	2	2	3	2	4	2	4	4	4	2	5	5	3	5	5	6	3	6
state 4	999	999	999	1	4	1	3	3	2	4	4	5	5	4	5	3	6	5	6	5
state 5	999	999	999	1	4	3	2	3	4	4	2	5	4	2	4	5	6	5	6	6
state 6	999	999	999	3	3	3	2	4	4	2	4	5	2	4	5	5	4	5	6	5
state 7	999	999	999	3	3	3	3	4	2	4	4	5	4	5	5	3	4	5	6	3

index	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39
state 0	6	7	7	6	6	7	6	7	6	7	7	7	8	9	7	8	9	5	7	9
state 1	5	7	7	4	6	7	7	7	6	7	5	8	8	9	9	8	9	7	5	7
state 2	6	6	5	6	6	7	7	8	8	7	7	7	9	8	7	9	8	9	7	5
state 3	6	6	5	7	4	7	7	8	8	7	7	5	9	8	5	9	8	7	9	7
state 4	6	6	4	6	7	6	7	5	8	5	8	8	8	7	8	9	5	9	9	8
state 5	6	4	6	6	7	7	7	7	7	7	8	8	7	5	8	7	7	9	9	8
state 6	4	4	6	6	7	6	5	7	5	8	8	8	5	7	9	5	9	8	8	9
state 7	4	6	6	6	7	4	5	5	7	7	8	8	7	9	9	7	7	8	8	9

index	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54
state 0	9	9	9	8	8	7	8	9	7	8	8	9	10	7	7
state 1	9	7	9	8	8	7	7	9	9	7	10	9	999	999	999
state 2	8	5	8	6	9	9	7	8	9	9	9	10	10	999	999
state 3	8	7	8	6	9	9	9	8	7	8	7	10	999	999	999
state 4	7	8	7	7	6	8	9	7	8	10	9	9	7	11	999
state 5	5	8	5	8	8	9	9	7	8	10	9	9	999	999	999
state 6	7	9	7	8	8	8	7	7	9	8	9	7	10	999	999
state 7	9	9	9	9	6	6	7	9	9	8	9	9	999	999	999

Previous State:

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

index	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39
state 0	4	0	4	0	4	0	0	4	4	0	4	0	4	0	4	4	4	0	0	0
state 1	4	0	0	0	4	0	0	4	4	0	0	4	0	0	0	4	4	0	0	0
state 2	1	1	1	1	5	1	5	5	1	1	1	5	1	1	1	1	1	5	1	1
state 3	5	5	1	1	1	1	5	5	5	5	1	1	5	5	1	1	5	1	1	1
state 4	2	6	2	2	2	6	2	6	2	6	2	2	2	2	6	2	6	2	6	6
state 5	2	6	2	2	2	2	2	2	2	6	2	2	2	2	6	2	6	2	2	6
state 6	3	3	3	7	7	3	3	3	3	3	3	3	3	3	7	7	7	3	3	3
state 7	3	3	3	3	7	7	3	7	3	3	3	3	3	3	7	3	7	3	7	3

index	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54
state 0	0	0	0	4	0	4	0	0	0	4	4	0	0	0	0
state 1	0	0	0	0	0	4	0	0	0	4	4	0	0	0	0
state 2	5	5	1	1	1	1	1	1	1	1	1	1	1	0	0
state 3	1	1	5	1	1	5	1	1	1	1	5	1	0	0	0
state 4	2	6	6	2	2	2	6	6	2	2	2	6	6	6	0
state 5	2	6	6	2	2	2	6	6	2	2	2	6	0	0	0
state 6	3	7	3	3	7	7	3	3	7	3	7	3	3	0	0
state 7	3	7	3	3	3	7	3	3	7	3	7	3	0	0	0

[25, 27, 33, 37] Trellis Diagram, Cost:

index	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
state 0	0	0	3	4	6	9	11	5	8	10	11	8	11	13	12	10	13	14	11	13
state 1	999	4	1	6	6	7	11	1	6	10	11	10	9	13	14	10	11	14	9	13
state 2	999	999	6	5	9	8	10	6	3	7	12	7	10	10	13	13	12	13	6	10
state 3	999	999	6	1	7	8	8	8	3	9	12	7	10	10	13	11	12	13	10	12
state 4	999	999	999	8	8	11	9	9	8	4	7	10	9	7	12	12	15	12	13	9
state 5	999	999	999	8	6	11	9	11	8	6	9	10	9	5	12	10	15	12	13	7
state 6	999	999	999	7	1	8	10	8	9	7	12	11	8	8	11	5	12	13	14	12
state 7	999	999	999	9	5	10	10	8	11	3	10	9	10	10	11	9	12	13	12	12
state 8	999	999	999	999	10	9	1	11	10	10	7	10	11	11	8	12	13	8	15	13
state 9	999	999	999	999	10	9	5	11	10	10	5	8	9	11	10	12	13	6	13	13
state 10	999	999	999	999	11	8	8	10	13	9	8	11	4	10	9	13	12	11	14	14
state 11	999	999	999	999	9	8	6	10	13	11	8	11	8	10	5	11	12	11	14	14
state 12	999	999	999	999	8	1	9	9	8	12	9	8	9	11	10	12	5	14	13	15
state 13	999	999	999	999	10	5	9	11	10	10	9	4	9	9	10	12	9	14	13	15
state 14	999	999	999	999	11	8	8	10	11	11	4	7	10	12	11	13	12	11	14	14
state 15	999	999	999	999	11	6	8	10	9	11	6	9	10	12	13	13	10	13	14	14

index	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39
state 0	13	13	15	16	13	16	17	17	19	19	17	18	20	22	22	22	23	23	22	24
state 1	13	13	15	16	15	14	17	17	19	19	13	20	20	22	22	22	21	19	20	24
state 2	14	14	14	17	14	17	14	18	18	18	18	17	21	21	23	23	22	22	21	23
state 3	14	12	14	17	10	17	16	18	18	20	20	13	21	23	21	21	22	22	21	21
state 4	11	13	15	16	15	14	19	17	19	19	19	20	18	22	22	24	25	21	20	22
state 5	13	11	15	16	15	14	19	15	19	17	19	20	20	22	22	24	25	23	22	24
state 6	14	8	12	13	14	13	18	18	18	18	18	21	17	23	23	23	22	18	21	23
state 7	14	12	16	15	16	11	18	18	18	18	18	21	13	23	23	23	22	18	19	23
state 8	11	13	15	12	17	16	15	17	17	13	21	22	22	20	20	20	19	19	22	22
state 9	11	13	15	10	15	16	17	17	17	17	21	20	22	20	20	20	21	19	22	22
state 10	10	14	14	13	14	17	16	18	16	18	18	21	21	21	23	23	20	20	25	21
state 11	8	16	12	13	14	17	16	16	16	16	20	21	21	23	21	21	16	18	25	23
state 12	13	15	9	14	15	16	15	17	13	19	21	20	20	18	18	18	17	21	20	22
state 13	15	15	11	12	15	16	15	15	15	19	19	20	22	20	20	16	17	23	20	22
state 14	14	16	14	17	16	17	14	12	18	20	20	19	23	17	15	15	20	24	21	19
state 15	14	16	14	15	16	17	12	16	18	20	20	21	23	13	15	19	22	24	19	19

index	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55
state 0	23	25	27	25	24	24	27	29	31	32	33	34	35	29	30	30
state 1	25	25	27	27	26	26	25	29	31	30	33	34	999	999	999	999
state 2	24	24	26	28	25	29	26	28	32	31	32	33	36	999	999	999
state 3	24	26	26	26	25	27	26	26	30	31	32	33	999	999	999	999
state 4	23	25	21	27	28	28	31	27	31	32	33	26	35	37	999	999
state 5	23	25	23	25	28	26	31	29	29	32	33	30	999	999	999	999
state 6	22	24	24	24	27	27	28	28	26	31	32	33	34	999	999	999
state 7	24	24	24	24	25	27	28	28	30	31	32	31	999	999	999	999
state 8	23	25	25	23	26	26	29	29	29	32	33	34	27	37	36	999
state 9	23	25	25	23	28	26	29	31	29	30	31	34	999	999	999	999
state 10	24	20	24	26	27	29	28	32	30	31	26	35	34	999	999	999
state 11	24	22	22	24	27	27	28	30	30	31	30	35	999	999	999	999
state 12	23	23	25	25	24	28	29	29	29	30	33	34	35	33	999	999
state 13	19	21	25	25	26	28	29	29	31	26	33	34	999	999	999	999
state 14	20	24	24	26	27	27	28	30	30	31	32	33	32	999	999	999
state 15	22	24	24	26	25	27	28	30	30	31	32	33	999	999	999	999

Previous State:

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

index	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39
state 0	8	8	0	0	8	0	8	8	0	8	8	0	0	0	8	8	0	0	8	0
state 1	0	8	0	8	8	0	0	8	0	8	8	0	0	0	8	8	8	8	8	0
state 2	1	1	9	1	9	1	1	1	1	9	9	1	1	1	1	1	9	9	1	1
state 3	9	9	1	1	9	1	9	9	9	1	1	1	9	1	9	9	9	1	1	1
state 4	2	10	10	2	10	2	2	2	10	2	10	2	2	10	2	10	2	10	10	2
state 5	2	10	2	2	10	10	2	2	2	10	2	2	2	2	10	2	2	2	2	2
state 6	3	11	3	11	11	3	11	3	11	11	11	3	3	3	11	3	11	11	11	3
state 7	3	11	3	3	11	3	3	3	11	11	11	11	3	3	3	3	3	11	11	3
state 8	4	4	4	12	4	12	4	12	4	12	4	4	4	4	12	12	12	12	4	4
state 9	4	4	4	12	12	4	4	12	12	12	4	4	4	4	12	12	12	12	12	4
state 10	5	5	5	13	13	5	5	13	13	13	5	5	5	5	5	5	13	13	5	13
state 11	5	5	5	13	13	5	5	13	5	13	5	5	13	5	13	13	13	13	5	5
state 12	6	14	6	14	6	6	6	14	14	6	6	6	14	6	14	14	14	14	6	14
state 13	6	6	6	6	6	6	6	14	14	14	6	6	6	6	14	14	14	6	6	6
state 14	7	7	7	7	15	7	7	15	15	7	7	7	7	7	15	15	15	7	7	7
state 15	7	7	7	15	7	15	7	15	15	7	7	7	7	7	15	15	15	7	7	15

index	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55
state 0	8	0	0	8	8	0	0	0	0	0	8	0	8	8	0	0
state 1	0	0	0	0	0	8	0	0	0	8	0	8	0	0	0	0
state 2	9	9	1	1	9	1	1	1	1	9	1	9	1	0	0	0
state 3	9	1	9	9	9	1	9	1	1	9	1	9	0	0	0	0
state 4	10	10	10	2	10	2	2	2	2	10	2	10	2	2	0	0
state 5	10	2	10	10	10	2	2	2	2	10	2	10	0	0	0	0
state 6	3	3	11	11	3	3	11	3	3	11	3	3	3	0	0	0
state 7	3	11	11	11	11	3	3	3	3	3	11	11	0	0	0	0
state 8	12	4	12	4	12	12	4	12	4	4	4	4	4	4	12	0
state 9	4	4	12	4	4	12	12	4	4	12	12	12	0	0	0	0
state 10	13	13	13	5	5	5	5	5	13	5	13	5	5	0	0	0
state 11	13	13	13	5	5	13	5	13	5	5	13	5	0	0	0	0
state 12	6	6	6	6	6	14	6	6	6	6	6	6	6	14	0	0
state 13	14	14	14	14	14	6	6	14	6	6	6	6	0	0	0	0
state 14	15	15	15	7	7	7	15	7	7	7	7	15	7	0	0	0
state 15	15	15	7	7	7	7	7	7	7	15	15	7	0	0	0	0

State Transition Map:

[illegible]

Output Map:

[illegible]