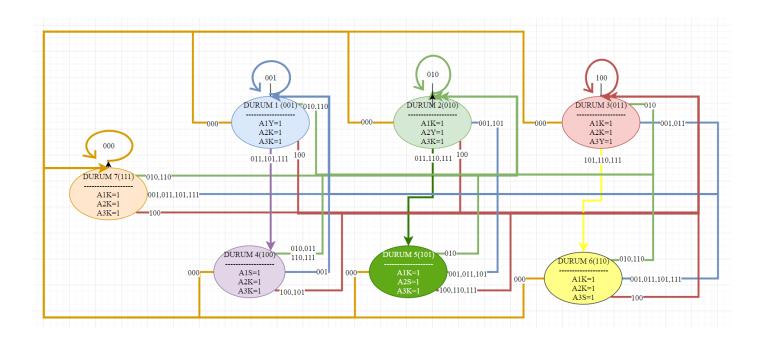
#### 2. Sistemin Durum Diyagramı



- Mavi hat çıkışları Durum 1'ye girecek.
- Açık Yeşil hat çıkışları Durum 2'ye girecek.
- Kırmızı hat çıkışları Durum 3'e girecek.
- Turuncu hat çıkışları Durum 7'ye girecek.
- Mor hat çıkışları Durum 4'e girecek.
- Koyu Yeşil hat çıkışları Durum 5'e girecek.
- Sarı hat çıkışları Durum 6'ye girecek.

### 3. Durum Tablosu

	Durum										
	Kod		No								
0	0	0	0								
0	0	1	1								
0	1	0	2								
0	1	1	3								
1	0	0	4								
1	0	1	5								
1	1	0	6								
1	1	1	7								

Q(t)	Q(t+1)	D	
0	0	0	
0	1	1	
1	0	0	
1	1	1	

	G	iirişle	er	_	mdi urur			onral Jurur		Fl	ip Flo	)p		p IŞIKLar							
No	Х3	X2	X1	Α	В	С	At	Bt	Ct	DA	DB	DC	A1K	A1S	A1Y	A2K	A2S	A2Y	АЗК	A3S	A3Y
0	0	0	0	0	0	0	1	1	1	1	1	1	1	0	0	1	0	0	1	0	0
1	0	0	0	0	0	1	1	1	1	1	1	1	1	0	0	1	0	0	1	0	0
2	0	0	0	0	1	0	1	1	1	1	1	1	1	0	0	1	0	0	1	0	0
3	0	0	0	0	1	1	1	1	1	1	1	1	1	0	0	1	0	0	1	0	0
4	0	0	0	1	0	0	1	1	1	1	1	1	1	0	0	1	0	0	1	0	0
5	0	0	0	1	0	1	1	1	1	1	1	1	1	0	0	1	0	0	1	0	0
6	0	0	0	1	1	0	1	1	1	1	1	1	1	0	0	1	0	0	1	0	0
7	0	0	0	1	1	1	1	1	1	1	1	1	1	0	0	1	0	0	1	0	0
8	0	0	1	0	0	0	0	0	1	0	0	1	0	0	1	1	0	0	1	0	0
9	0	0	1	0	0	1	0	0	1	0	0	1	0	0	1	1	0	0	1	0	0
10	0	0	1	0	1	0	0	0	1	0	0	1	0	0	1	1	0	0	1	0	0
11	0	0	1	0	1	1	0	0	1	0	0	1	0	0	1	1	0	0	1	0	0
12	0	0	1	1	0	0	0	0	1	0	0	1	0	0	1	1	0	0	1	0	0
13	0	0	1	1	0	1	0	0	1	0	0	1	0	0	1	1	0	0	1	0	0
14	0	0	1	1	1	0	0	0	1	0	0	1	0	0	1	1	0	0	1	0	0
15	0	0	1	1	1	1	0	0	1	0	0	1	0	0	1	1	0	0	1	0	0
16	0	1	0	0	0	0	0	1	0	0	1	0	1	0	0	0	0	1	1	0	0
17	0	1	0	0	0	1	0	1	0	0	1	0	1	0	0	0	0	1	1	0	0
18	0	1	0	0	1	0	0	1	0	0	1	0	1	0	0	0	0	1	1	0	0
19	0	1	0	0	1	1	0	1	0	0	1	0	1	0	0	0	0	1	1	0	0
20	0	1	0	1	0	0	0	1	0	0	1	0	1	0	0	0	0	1	1	0	0
21	0	1	0	1	0	1	0	1	0	0	1	0	1	0	0	0	0	1	1	0	0
22	0	1	0	1	1	0	0	1	0	0	1	0	1	0	0	0	0	1	1	0	0
23	0	1	0	1	1	1	0	1	0	0	1	0	1	0	0	0	0	1	1	0	0
24	0	1	1	0	0	0	0	0	1	0	0	1	0	0	1	1	0	0	1	0	0
25	0	1	1	0	0	1	1	0	0	1	0	0	0	1	0	1	0	0	1	0	0
26	0	1	1	0	1	0	1	0	1	1	0	1	1	0	0	0	1	0	1	0	0
27	0	1	1	0	1	1	0	0	1	0	0	1	0	0	1	1	0	0	1	0	0
28	0	1	1	1	0	0	0	1	0	0	1	0	1	0	0	0	0	1	1	0	0

30   0   1   1   1   1   0   0   1   0   0   1   0   0   1   0   0   1   0   0   1   0   0   1   0   0   1   0	29	0	1	1	1	0	1	0	0	1	0	0	1	0	0	1	1	0	0	1	0	0
32   1   0   0   0   0   1   1   0   1   1   0   0   1   0   0   1   0   0   1   0   0   1   0   0   1   0   0   0   0   0   0   1   1   0   1   1   0	30	0	1	1	1	1	0	0	0	1	0	0	1	0	0	1	1	0	0	1	0	0
33   1   0   0   0   1   1   1   1   1   1   1   0   0   1   0   0   1   1   0   1   1   0   1   1   0   0   1   0   0   1   1   0   1   1   0   1   1   0   1   1   0   1   1   0   1   1   0   1   1   0   0   1   1   0   1   1   0   0   1   0   0   1   0   0   1   0   0   1   0   0   1   0	31	0	1	1	1	1	1	0	0	1	0	0	1	0	0	1	1	0	0	1	0	0
34   1   0   0   0   1   1   0   1   1   0   1   1   0   0   1   0   0   1   1   0   1   1   0   1   1   0   1   1   0   1   1   0   1   1   0   1   1   0   1   1   0   1   1   0   1   1   0   1   1   0   1   1   0   1   1   0   1   1   0	32	1	0	0	0	0	0	0	1	1	0	1	1	1	0	0	1	0	0	0	0	1
35   1   0   0   0   1   1   0   1   1   0   1   0   0   1   1   0   1   1   0   0   1   0   0   1   1   0   0   1   0   0   1   1   0   0   1   0   0   1   1   0   0   1   0   0   1   1   0   0   1   0   0   1   1   0   1   1   0   1   1   0   1   1   0   1   1   0   1   1   0   1   1   0   0   0   0   0   0   0   1   0   0   0   0   0   1   0   0   0   1   0   0   0   1   0   0   0   1   0   0   1   0   0   0   1   0   0	33	1	0	0	0	0	1	0	1	1	0	1	1	1	0	0	1	0	0	0	0	1
36   1   0   0   1   0   1   1   0   1   1   0   0   1   0   0   1   0   0   1   0	34	1	0	0	0	1	0	0	1	1	0	1	1	1	0	0	1	0	0	0	0	1
37   1   0   0   1   0   1   1   0   1   1   0   1   1   0   0   1   1   0   0   1   1   0   0   1   1   0   0   1   1   0   0   1   1   0   0   1   1   0   0   1   1   0   0   1   1   0   0   1   1   0   0   0   0   1   1   0   0   0   1   0   0   1   0   0   1   0   0   1   0   0   1   0   0   1   0   0   1   0   0   1   0   0   1   0   0   1   0   0   1   0   0   1   0   0   1   0   0   1   0   0   1   0   0   1   0   0	35	1	0	0	0	1	1	0	1	1	0	1	1	1	0	0	1	0	0	0	0	1
38   1   0   0   1   1   0   1   1   0   1   1   0   0   1   1   0   1   1   0   1   1   0   1   1   0   1   1   0   1   0   0   0   0   1   0   0   1   0   0   1   0   0   1   0   0   1   0   0   1   0   0   1   0   0   1   0   0   1   0   0   1   0   0   1   0   0   1   0   0   1   0   0   1   0   0   0   1   0   0   0   1   0   0   1   0   0   0   1   0   0   1   0   0   1   0   0   1   0   0   1   0   0   1   0   0   1	36	1	0	0	1	0	0	0	1	1	0	1	1	1	0	0	1	0	0	0	0	1
39   1   0   0   1   1   1   0   1   1   1   0   1   1   0   1   0   0   0   1   0   0   1   0   0   1   0   0   1   0   0   1   0   0   1   0   0   1   0   0   1   0   0   1   0   0   0   1   0   0   0   1   0   0   0   1   0   0   0   1   0   0   1   0   0   1   0   0   1   0   0   0   1   0   0   0   1   0   0   0   1   0   0   0   1   0   0   1   0   0   1   0   0   1   0   0   1   0   0   1   0   0   1   0   0   1   0	37	1	0	0	1	0	1	0	1	1	0	1	1	1	0	0	1	0	0	0	0	1
40   1   0   1   0	38	1	0	0	1	1	0	0	1	1	0	1	1	1	0	0	1	0	0	0	0	1
41   1   0   1   0	39	1	0	0	1	1	1	0	1	1	0	1	1	1	0	0	1	0	0	0	0	1
42   1   0   1   0   0   0   1   0   0   0   1   0   0   0   1   0	40	1	0	1	0	0	0	0	0	1	0	0	1	0	0	1	1	0	0	1	0	0
43   1   0   1   1   1   1   1   1   1   1   1   1   1   1   1   1   1   1   1   0   1   1   0   0   1   0   0   1   0   0   1   0   0   1   0   0   0   1   0   0   1   0   0   1   0   0   0   1   0   0   0   1   0   0   1   0   0   1   0   0   1   0   0   1   0   0   1   0   0   1   0   0   1   0   0   1   0   0   1   0   0   1   0   0   1   0   0   1   0   0   1   0   0   1   0   0   0   1   0   0   0   1   0   0   0   1	41	1	0	1	0	0	1	1	0	0	1	0	0	0	1	0	1	0	0	1	0	0
44   1   0   1   1   0   1   1   0   1   1   0   1   1   0   0   1   1   0   0   1   0   0   1   0   0   1   0   0   1   0   0   1   0   0   1   0   0   1   0   0   1   0   0   1   0   0   1   0		1	0	1	0	1	0	0	0	1	0	0	1	0		1	1	0	0	1	0	0
45   1   0   1   1   0   1   0   0   1   0   0   1   0   0   1   0   0   1   0   0   1   0   0   1   0   0   1   0   0   1   0   0   1   0   0   1   0   0   1   0   0   1   0   0   1   0   0   1   0   0   0   1   0   0   0   1   0   0   0   1   0   0   0   1   0   0   0   1   0   0   0   0   1   0   0   0   0   0   1   0   0   0   0   1   0	43	1	0	1	0	1	1	1	1	0	1	1	0	1	0	0	1	0	0	0	1	0
46   1   0   1   1   0   0   1   0   0   1   0   0   1   0   0   1   0   0   1   0   0   1   0   0   1   0   0   1   0   0   0   1   0   0   0   1   0   0   0   1   0   0   0   1   0   0   0   1   0   0   0   1   0   0   0   1   0   0   0   1   1   0   0   0   1   1   0   0   0   0   1   1   0   0   0   0   1   1   0   0   0   1   1   0   0   0   1   0   0   0   1   0   0   0   1   0   0   0   1   0   0   0   1   0   0   0		1	0	1	1	0	0		1	1	0	1	1	1			1		0	0		
47   1   0   1   1   1   1   1   1   1   1   1   1   1   1   1   1   1   1   1   0   0   1   1   0   0   1   1   0   0   1   1   0   0   0   1   1   0   0   0   1   1   0   0   0   1   1   0   0   0   0   0   1   1   0   0   0   0   0   1   1   0   0   0   0   0   1   1   0   0   0   0   0   1   1   0		1		1		0				1		0										0
48   1   1   0   0   0   0   1   0   0   1   0   0   0   1   0   0   1   0   0   0   1   0   0   0   1   0   0   0   1   1   0   0   0   1   1   0   0   0   0   1   1   0   0   0   0   1   1   0   0   0   1   1   0   0   0   1   0   0   0   1   0   0   0   1   0   0   0   1   0   0   0   1   0   0   0   1   0   0   0   1   0   0   1   0   0   1   0   0   1   0   0   1   0   0   1   0   0   1   0   0   0   1   1   0   0   0		1							0		0											
49 1 1 0 0 1 0 1 0 1 0 0 1 0 0 1 0 0 0 1 1 0 0 0 1 1 0 0 0 1 1 0 0 0 1 1 0 0 0 1 0 0 0 0 1 0 0 0 0 1 0 0 0 0 1 0 0 0 0 1 0 0 0 0 1 0 0 0 1 0 0 0 1 0 0 0 1 0 0 0 1 0 0 0 1 0 0 0 1 1 0 0 0 1 1 0 0 0 1 1 0 0 0 0 1 1 0 0 0 0 1 1 0 0 0 1 1 0 0		1	0			1		0		1	0	0										
50   1   1   0   1   0   1   1   0   1   1   0   1   1   0   0   1   0   1   0   0   0   1   0   0   0   0   0   0   0   0   0   0   0   0   1   0   0   0   0   0   1   0   0   0   0   0   1   0   0   0   0   0   1   0   0   0   0   1   0   0   0   0   0   1   0		1		_									_									
51   1   1   0   0   1   1   1   1   1   0   1   0   0   1   0   0   1   0   0   1   0   0   0   1   0   0   1   0   0   0   1   0   0   0   1   0   0   0   0   0   1   1   0		1																				
52 1 1 0 1 0 0 1 0 0 1 0 0 0 0 0 1 1 0 1 1 0 0 0 0 0 0 0 0 0 0 0 0 1 1 0 0 0 0 1 1 0				_						_												
53   1   1   0   1   0   1   1   0   1   1   0   0   1   0   0   0   1   0   0   1   0   0   1   0   0   0   1   0   0   0   1   0   0   0   1   1   0   0   0   1   0   0   0   1   1   0   0   0   1   0   0   0   0   0   1   0   0   0   0   1   0   0   0   1   0   0   0   0   1   0   0   0   1   0   0   0   1   0   0   0   1   1   0   0   0   1   1   0   0   1   0   0   1   0   0   0   1   0   0   0   1   0   0   0   0   0																						
54   1   1   0   1   0   0   1   0   0   1   0   0   0   0   0   1   1   0   0   0   0   1   1   0   0   0   1   0   0   0   1   0   0   0   1   0   0   0   0   1   0   0   0   1   0   0   0   1   0   0   0   1   0   0   0   1   0   0   0   1   0   0   1   0   0   0   1   0   0   0   1   0   0   1   0   0   0   1   0   0   1   0   0   1   0   0   1   0   0   1   0   0   1   0   0   0   1   0   0   0   1   0   0   0   0   0																						
55 1 1 0 1 1 0 0 1 0 0 0 0 1 0 0 0 0 1 0 0 0 1 0 0 1 0 0 1 0 0 1 1 0 0 1 0 0 1 0 0 0 1 0 0 1 0 0 1 0 0 0 1 0 0 0 1 0 0 0 1 0 0 0 1 0 0 0 1 0 0 0 0 1 0				_						_												
56 1 1 1 0 0 0 0 1 0 0 1 0 0 1 0 0 0 1 0 0 0 1 0 0 1 0 0 0 1 0 0 1 0 0 1 0 0 0 1 0 0 0 1 0 0 1 0 0 0 1 0 0 0 0 1 0 0 0 0 1 0 0 0 0 0 1 0 0 0 0 1 0																						
57 1 1 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 0 1 0 0 0 1 0 0 0 1 0 0 0 1 0 0 0 1 0 0 0 1 0 0 0 1 0 0 0 1 0 0 0 1 0 0 0 0 1 0				_							_											
58 1 1 1 0 1 0 1 1 0 1 1 0 0 0 0 1 0 1 0 0 0 0 1 0 0 0 0 1 0 0 0 1 0 0 0 1 0 0 0 1 0 0 0 0 1 0 0 0 0 1 0																						
59 1 1 1 0 1 1 0 1 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 0 0 0 1 0 0 0 0 0 1 0																						
60 1 1 1 1 0 0 1 0 0 1 0 0 0 0 0 1 1 0 0 0 0 0 1 1 0 0 0 0 0 0 0 0 0 1 0 0 0 0 1 0 0 0 0 1 0 0 0 0 1 0																						
61 1 1 1 1 0 1 0 1 1 0 1 1 0 1 0 1 1 0 0 0 1 0 0 0 1 62 1 1 1 1 1 0 0 0 1 0 0 0 1 0 0 0 0 0 0																						
62 1 1 1 1 0 0 0 1 0 0 1 0 0 1 1 0 0																						
	63	1	1	1	1	1	1	0	0	1	0	0	1	0	0	1	1	0	0	1	0	0

# 4. Denklemler ve Sadeleştirme İşlemleri

DA İÇİN 1. SEVİYE

No	Х3	X2	X1	А	В	С	DA	Gruplar
0,1	0	0	0	0	0	ı	1	0
0,2	0	0	0	0	-	0	1	0
0,4	0	0	0	ı	0	0	1	0
1,3	0	0	0	0	_	1	1	1
1,5	0	0	0	_	0	1	1	1
2,3	0	0	0	0	1	_	1	1
2,6	0	0	0	_	1	0	1	1
4,5	0	0	0	1	0	_	1	1
4,6	0	0	0	1	_	0	1	1
3,7	0	0	0	_	1	1	1	2
5,7	0	0	0	1	_	1	1	2
6,7	0	0	0	1	1	_	1	2
25,57	_	1	1	0	0	1	1	3
26,58	_	1	1	0	1	0	1	3
41,43	1	0	1	0	_	1	1	3
41,57	1	_	1	0	0	1	1	3
50,51	1	1	0	0	1	_	1	3
50,58	1	1	_	0	1	0	1	3
43,59	1	_	1	0	1	1	1	4
51,59	1	1	_	0	1	1	1	4
57,59	1	1	1	0	_	1	1	4
58,59	1	1	1	0	1		1	4

DA İÇİN 2. SEVİYE

No	Х3	X2	X1	Α	В	С	DA	Gruplar
0,1,2,3	0	0	0	0	ı	ı	1	0
0,1,4,5	0	0	0	ı	0	-	1	0
0,2,4,6	0	0	0	ı	1	0	1	0
1,3,5,7	0	0	0	ı	ı	1	1	1
2,3,6,7	0	0	0	ı	1	-	1	1
4,5,6,7	0	0	0	1	ı	ı	1	1
41,43,57,59	1	_	1	0	1	1	1	3
50,51,58,59	1	1	-	0	1	_	1	3

DA İÇİN 3.SEVİYE

No	Х3	X2	X1	Α	В	С	DA	Gruplar
0,1,2,3,4,5,6,7	0	0	0	_	_	_	1	0

DA İÇİN FORMÜL.

No	Х3	X2	X1	Α	В	С
25	0	1	1	0	0	1
0,1,2,3,4,5,6,7	0	0	0	ı	ı	
41,43,57,59	1	- 1	1	0	ı	1
26,58	_	1	1	0	1	0
50,51	1	1	0	0	1	

!X3X2X1!A!BC + !X3!X2!X1 + X3X1!AC + X2X1!AB!C + X3X2!X1!AB

No	Х3	X2	X1	Α	В	С	DB	Gruplar
0,1	0	0	0	0	0		1	0
0,2	0	0	0	0		0	1	0
0,4	0	0	0		0	0	1	0
0,16	0		0	0	0	0	1	0
0,32		0	0	0	0	0	1	0
1,3	0	0	0	0		1	1	1
1,5	0	0	0		0	1	1	1
1,17	0		0	0	0	1	1	1
1,33		0	0	0	0	1	1	1
2,3	0	0	0	0	1		1	1
2,6	0	0	0	_	1	0	1	1
2,18	0	_	0	0	1	0	1	1
2,34	_	0	0	0	1	0	1	1
4,5	0	0	0	1	0	_	1	1
4,6	0	0	0	1	_	0	1	1
4,20	0	_	0	1	0	0	1	1
4,36	_	0	0	1	0	0	1	1
16,17	0	1	0	0	0	_	1	1
16,18	0	1	0	0	ı	0	1	1
16,20	0	1	0	ı	0	0	1	1
16,48		1	0	0	0	0	1	1
32,33	1	0	0	0	0	ı	1	1
32,34	1	0	0	0	ı	0	1	1
32,36	1	0	0	_	0	0	1	1
32,48	1	_	0	0	0	0	1	1
3,7	0	0	0	_	1	1	1	2
3,19	0	_	0	0	1	1	1	2
3,35	_	0	0	0	1	1	1	2
5,7	0	0	0	1	_	1	1	2
5,21	0	_	0	1	0	1	1	2
5,37	_	0	0	1	0	1	1	2
6,7	0	0	0	1	1	_	1	2
6,22	0	_	0	1	1	0	1	2
6,38		0	0	1	1	0	1	2
17,19	0	1	0	0	_	1	1	2
17,21	0	1	0	_	0	1	1	2
17,49	_	1	0	0	0	1	1	2
18,19	0	1	0	0	1	_	1	2
18,22	0	1	0	_	1	0	1	2
20,21	0	1	0	1	0	_	1	2
20,22	0	1	0	1	_	0	1	2
20,28	0	1	_	1	0	0	1	2
20,52	_	1	0	1	0	0	1	2
33,35	1	0	0	0	_	1	1	2
33,37	1	0	0	_	0	1	1	2
33,49	1	_	0	0	0	1	1	2

34,35	1	0	0	0	1		1	2
34,38	1	0	0		1	0	1	2
36,37	1	0	0	1	0		1	2
36,38	1	0	0	1		0	1	2
36,44	1	0		1	0	0	1	2
36,52	1	_	0	1	0	0	1	2
48,49	1	1	0	0	0	_	1	2
48,52	1	1	0	_	0	0	1	2
7,23	0	_	0	1	1	1	1	3
7,39	_	0	0	1	1	1	1	3
19,23	0	1	0	_	1	1	1	3
19,51	_	1	0	0	1	1	1	3
21,23	0	1	0	1	ı	1	1	3
21,53	-	1	0	1	0	1	1	3
22,23	0	1	0	1	1	ı	1	3
22,54	-	1	0	1	1	0	1	3
28,60	ı	1	1	1	0	0	1	3
35,39	1	0	0	ı	1	1	1	3
35,43	1	0	_	0	1	1	1	3
35,51	1	_	0	0	1	1	1	3
37,39	1	0	0	1	ı	1	1	3
37,53	1	-	0	1	0	1	1	3
38,39	1	0	0	1	1	ı	1	3
38,54	1	_	0	1	1	0	1	3
44,60	1	_	1	1	0	0	1	3
49,51	1	1	0	0	_	1	1	3
49,53	1	1	0	_	0	1	1	3
52,53	1	1	0	1	0	_	1	3
52,54	1	1	0	1	_	0	1	3
52,60	1	1	_	1	0	0	1	3
23,55	_	1	0	1	1	1	1	4
39,55	1	_	0	1	1	1	1	4
43,59	1	_	1	0	1	1	1	4
51,55	1	1	0	ı	1	1	1	4
51,59	1	1	_	0	1	1	1	4
53,55	1	1	0	1	_	1	1	4
53,61	1	1	_	1	0	1	1	4
54,55	1	1	0	1	1	_	1	4
60,61	1	1	1	1	0	_	1	4

DB İÇİN 2. SEVİYE

No	X3	X2	X1	Α	В	С	DB	Gruplar
0,1,2,3	0	0	0	0			1	0
0,1,4,5	0	0	0		0	_	1	0
0,1,16,17	0		0	0	0	_	1	0
0,1,32,33		- 0	0	0	0	_	1	0
0,2,4,6	- 0	0	0			0	1	0
0,2,16,18	0	0	0	0	_	0	1	0
0,2,32,34		- 0	0	0	_	0	1	0
0,4,16,20	0		0		0	0	1	0
0,4,32,36		- 0	0	_	0	0	1	0
0,16,32,48	_		0	- 0	0	0	1	0
1,3,5,7	- 0	- 0	0			1	1	1
1,3,17,19	0		0	- 0	_	1	1	1
1,3,33,35		0	0	0	_	1	1	1
1,5,17,21	0		0		0	1	1	1
1,5,33,37		0	0	_	0	1	1	1
1,17,33,49	_		0	- 0	0	1	1	1
2,3,6,7	0	0	0		1		1	1
2,3,18,19	0		0	0	1		1	1
2,3,34,35		0	0	0	1	_	1	1
2,6,18,22	0		0		1	0	1	1
2,6,34,38		0	0	_	1	0	1	1
4,5,6,7	- 0	0	0	1			1	1
4,5,20,21	0		0	1	0	_	1	1
4,5,36,37		0	0	1	0		1	1
4,6,20,22	0	_	0	1	_	0	1	1
4,6,36,38	_	0	0	1		0	1	1
4,20,36,52	_	_	0	1	0	0	1	1
16,17,18,19	0	1	0	0	_	_	1	1
16,17,20,21	0	1	0	_	0	_	1	1
16,17,48,49	ı	1	0	0	0	-	1	1
16,18,20,22	0	1	0	ı	ı	0	1	1
16,20,48,52	ı	1	0	ı	0	0	1	1
32,33,34,35	1	0	0	0	_	_	1	1
32,33,36,37	1	0	0	_	0	_	1	1
32,33,48,49	1	_	0	0	0	_	1	1
32,34,36,38	1	0	0	_	_	0	1	1
32,36,48,52	1	_	0	_	0	0	1	1
3,7,19,23	0	_	0	_	1	1	1	2
3,7,35,39	_	0	0	_	1	1	1	2
3,19,35,51	_	_	0	0	1	1	1	2
5,7,21,23	0	_	0	1	_	1	1	2
5,7,37,39	_	0	0	1	_	1	1	2
5,21,37,53	_	_	0	1	0	1	1	2
6,7,22,23	0	_	0	1	1	_	1	2
6,7,38,39	_	0	0	1	1	_	1	2
6,22,38,54	_	_	0	1	1	0	1	2
17,19,21,23	0	1	0	_	_	1	1	2

17,19,49,51	_	1	0	0	_	1	1	2
17,21,49,53	_	1	0	_	0	1	1	2
18,19,22,23	0	1	0	ı	1	ı	1	2
20,21,22,23	0	1	0	1	ı	ı	1	2
20,21,52,53	-	1	0	1	0	ı	1	2
20,22,52,54	_	1	0	1	ı	0	1	2
20,28,52,60	_	1	ı	1	0	0	1	2
33,35,37,39	1	0	0	_	_	1	1	2
33,35,49,51	1	_	0	0	_	1	1	2
33,37,49,53	1	_	0	ı	0	1	1	2
34,35,38,39	1	0	0	ı	1	ı	1	2
36,37,38,39	1	0	0	1	ı	ı	1	2
36,37,52,53	1	_	0	1	0	ı	1	2
36,38,52,54	1	_	0	1	ı	0	1	2
36,44,52,60	1	_	ı	1	0	0	1	2
48,49,52,53	1	1	0	ı	0	ı	1	2
7,23,39,55	_	_	0	1	1	1	1	3
19,23,51,55	_	1	0	ı	1	1	1	3
21,23,53,55	_	1	0	1	ı	1	1	3
22,23,54,55	_	1	0	1	1	ı	1	3
35,39,51,55	1	_	0	ı	1	1	1	3
35,43,51,59	1	-	ı	0	1	1	1	3
37,39,53,55	1	_	0	1	1	1	1	3
38,39,54,55	1	_	0	1	1	_	1	3
49,51,53,55	1	1	0			1	1	3
52,53,54,55	1	1	0	1			1	3
52,53,60,61	1	1	_	1	0	_	1	3

DB İÇİN 3. SEVİYE

No	Х3		X2	X1	А	В	С	DB	Gruplar
0,1,2,3,4,5,6,7		0	0	0	_	_	_	1	0
0,1,2,3,16,17,18,19		0	_	0	0	_	_	1	0
0,1,2,3,32,33,34,35	_		0	0	0	_	_	1	0
0,1,4,5,16,17,20,21		0	_	0	_	0	_	1	0
0,1,4,5,32,33,36,37	_		0	0	_	0	_	1	0
0,1,16,17,32,33,48,49	_		_	0	0	0	_	1	0
0,2,4,6,16,18,20,22		0	_	0	_	_	0	1	0
0,2,4,6,32,34,36,38	_		0	0	_	_	0	1	0
0,4,16,20,32,36,48,52	_		_	0	_	0	0	1	0
1,3,5,7,17,19,21,23		0	_	0	_	_	1	1	1
1,3,5,7,33,35,37,39	_		0	0	_	_	1	1	1
1,3,17,19,33,35,49,51	_		ı	0	0	_	1	1	1
1,5,17,21,33,37,49,53	_		ı	0	_	0	1	1	1
2,3,6,7,18,19,22,23		0	ı	0	_	1	_	1	1
2,3,6,7,34,35,38,39	_		0	0	_	1	_	1	1
4,5,6,7,20,21,22,23		0	ı	0	1	_	_	1	1
4,5,6,7,36,37,38,39	_		0	0	1	_	_	1	1
4,5,20,21,36,37,52,53	_		ı	0	1	0	_	1	1
4,6,20,22,36,38,52,54	_		ı	0	1	_	0	1	1
16,17,18,19,20,21,22,23		0	1	0	_	_	1	1	1
16,17,20,21,48,49,52,53	_		1	0	_	0		1	1
32,33,34,35,36,37,38,39		1	0	0	_	_	_	1	1
32,33,36,37,48,49,52,53		1	ı	0	_	0	1	1	1
3,7,19,23,35,39,51,55	_		ı	0	_	1	1	1	2
5,7,21,23,37,39,53,55	_		ı	0	1	_	1	1	2
6,7,22,23,38,39,54,55	_		_	0	1	1	_	1	2
17,19,21,23,49,51,53,55			1	0		_	1	1	2
20,21,22,23,52,53,54,55			1	0	1			1	2
33,35,37,39,49,51,53,55		1	_	0	_	_	1	1	2
36,37,38,39,52,53,54,55		1	_	0	1	_	_	1	2

#### DB İÇİN 4. SEVİYE

No	Х3	X2	X1	Α	В	С	DB	Gruplar
0,1,2,3,4,5,6,7,16,17,18,19,20,21,22,23	0	_	0				1	0
0,1,2,3,4,5,6,7,32,33,34,35,36,37,38,39	ı	0	0	-	-	-	1	0
0,1,4,5,16,17,20,21,32,33,36,37,48,49,52,53		_	0	-	0	-	1	0
1,3,5,7,17,19,21,23,33,35,37,39,49,51,53,55	1	-	0	-	-	1	1	1
4,5,6,7,20,21,22,23,36,37,38,39,52,53,54,55			0	1		_	1	1

### DB İÇİN FORMÜL

No	Х3	X2	X1	Α	В	С
2,3,18,19	0		0	0	1	
0,1,4,5,16,17,20,21,32,33,36,37,48,49,52,53	_		0	ı	0	
6,7,22,23,38,39,54,55	_	_	0	1	1	
35,43,51,59	1	_	_	0	1	1
28,6	_	1	1	1	0	0
34	1	0	0	0	1	0
44	1	0	1	1	0	0
61	1	1	1	1	0	1

!X3!X1!AB + !X1!B + !X1AB + X3!ABC + X2X1A!B!C + X3!X2!X1!AB!C + X3!X2X1A!B!C + X3X2X1A!BC

DC İÇİN 1. SEVİYE

No	X3	X2	X1	Α	В	С	DC	Gruplar
0,1	0	0	0	0	0		1	0
0,2	0	0	0	0	0	0	1	0
0,2	0	0	0	U	0	0	1	0
0,4	0	0	0	0	0	0	1	0
	0	0				0	1	
0,32	_		0	0	0	1		0
1,3	0	0	0	0	_	1	1	1
1,5			0	_	0	1	1	1
1,9	0	0		0	0			1
1,33	_	0	0	0	0	1	1	1
2,3	0	0	0	0	1		1	
2,6	0	0	0	_	1	0	1	1
2,10	0	0	_	0	1	0	1	1
2,34		0	0	0	1	0	1	1
4,5	0	0	0	1	0		1	1
4,6	0	0	0	1	_	0	1	1
4,12	0	0		1	0	0	1	1
4,36	_	0	0	1	0	0	1	1
8,9	0	0	1	0	0	_	1	1
8,10	0	0	1	0	_	0	1	1
8,12	0	0	1	_	0	0	1	1
8,24	0	_	1	0	0	0	1	1
8,40	_	0	1	0	0	0	1	1
32,33	1	0	0	0	0	_	1	1
32,34	1	0	0	0	_	0	1	1
32,36	1	0	0	_	0	0	1	1
32,40	1	0	_	0	0	0	1	1
3,7	0	0	0	_	1	1	1	2
3,11	0	0	_	0	1	1	1	2
3,35	_	0	0	0	1	1	1	2
5,7	0	0	0	1	_	1	1	2
5,13	0	0	_	1	0	1	1	2
5,37	_	0	0	1	0	1	1	2
6,7	0	0	0	1	1	_	1	2
6,14	0	0	ı	1	1	0	1	2
6,38	-	0	0	1	1	0	1	2
9,11	0	0	1	0		1	1	2
9,13	0	0	1	_	0	1	1	2
10,11	0	0	1	0	1	_	1	2
10,14	0	0	1	_	1	0	1	2
10,26	0	_	1	0	1	0	1	2
10,42		- 0	1	0	1	0	1	2
12,13	0	0	1	1	0	_	1	2
12,14	0	0	1	1		0	1	2
12,44		0	1	1	0	0	1	2
24,26	0	1	1	0		0	1	2
24,56		1	1	0	0	0	1	2
33,35	1	0	0	0		1	1	2
55,55					L <b>–</b>			

33,37	1	0	0		0	1	1	2
34,35	1	0	0	0	1		1	2
34,38	1	0	0		1	0	1	2
34,42	1	0		0	1	0	1	2
34,50	1		0	0	1	0	1	2
36,37	1	0	0	1	0		1	2
36,38	1	0	0	1		0	1	2
36,44	1	0	_	1	0	0	1	2
40,42	1	0	1	0	_	0	1	2
40,44	1	0	1	_	0	0	1	2
40,56	1	_	1	0	0	0	1	2
7,15	0	0	_	1	1	1	1	3
7,39	_	0	0	1	1	1	1	3
11,15	0	0	1	_	1	1	1	3
11,27	0	_	1	0	1	1	1	3
13,15	0	0	1	1	_	1	1	3
13,29	0		1	1	0	1	1	3
13,45	_	0	1	1	0	1	1	3
14,15	0	0	1	1	1	_	1	3
14,30	0	_	1	1	1	0	1	3
14,46	_	0	1	1	1	0	1	3
26,27	0	1	1	0	1	_	1	3
26,30	0	1	1	_	1	0	1	3
26,58	_	1	1	0	1	0	1	3
35,39	1	0	0	_	1	1	1	3
37,39	1	0	0	1	_	1	1	3
37,45	1	0	_	1	0	1	1	3
37,53	1		0	1	0	1	1	3
38,39	1	0	0	1	1	_	1	3
38,46	1	0	_	1	1	0	1	3
42,46	1	0	1	_	1	0	1	3
42,58	1	_	1	0	1	0	1	3
44,45	1	0	1	1	0	_	1	3
44,46	1	0	1	1	_	0	1	3
50,58	1	1	_	0	1	0	1	3
56,58	1	1	1	0	_	0	1	3
15,31	0		1	1	1	1	1	4
15,47	-	0	1	1	1	1	1	4
27,31	0	1	1	_	1	1	1	4
29,31	0	1	1	1		1	1	4
29,61		1	1	1	0	1	1	4
30,31	0	1	1	1	1		1	4
30,62		1	1	1	1	0	1	4
39,47	1	0		1	1	1	1	4
45,47	1	0	1	1	-	1	1	4
45,61	1		1	1	0	1	1	4
46,47	1	0	1	1	1	_	1	4
46,62	1		1	1	1	0	1	4
53,61	1	1	_	1	0	1	1	4

58,62	1	1	1	_	1	0	1	4
31,63	ı	1	1	1	1	1	1	5
47,63	1	_	1	1	1	1	1	5
61,63	1	1	1	1	_	1	1	5
62,63	1	1	1	1	1		1	5

DC İÇİN 2. SEVİYE

	JIN 2. SEY	X2	X1	Δ.	В	С	DC	Cruplar
No 0.1.2.2	X3 0	0	0	A 0	В	C		Gruplar
0,1,2,3				U	_	_	1	0
0,1,4,5	0	0	0	_	0	_	1	0
0,1,8,9	0	0	_	0	0	_	1	0
0,1,32,33		0	0	0	0	_	1	0
0,2,4,6	0	0	0	_	_	0	1	0
0,2,8,10	0	0		0	_	0	1	0
0,2,32,34		0	0	0		0	1	0
0,4,8,12	0	0	_	_	0	0	1	0
0,4,32,36	_	0	0	_	0	0	1	0
0,8,32,40	_	0	_	0	0	0	1	0
1,3,5,7	0	0	0	_	_	1	1	1
1,3,9,11	0	0	_	0	_	1	1	1
1,3,33,35	_	0	0	0	_	1	1	1
1,5,9,13	0	0	_	_	0	1	1	1
1,5,33,37	_	0	0	_	0	1	1	1
2,3,6,7	0	0	0	_	1	_	1	1
2,3,10,11	0	0	_	0	1	_	1	1
2,3,34,35	_	0	0	0	1	_	1	1
2,6,10,14	0	0	_	_	1	0	1	1
2,6,34,38	_	0	0	_	1	0	1	1
2,10,34,42	_	0	_	0	1	0	1	1
4,5,6,7	0	0	0	1	_	_	1	1
4,5,12,13	0	0	_	1	0	_	1	1
4,5,36,37	_	0	0	1	0	_	1	1
4,6,12,14	0	0	_	1	_	0	1	1
4,6,36,38	_	0	0	1	_	0	1	1
4,12,36,44	_	0	_	1	0	0	1	1
8,9,10,11	0	0	1	0	_	_	1	1
8,9,12,13	0	0	1	_	0	_	1	1
8,10,12,14	0	0	1	_	_	0	1	1
8,10,24,26	0	_	1	0	_	0	1	1
8,10,40,42	_	0	1	0		0	1	1
8,12,40,44	_	0	1	_	0	0	1	1
8,24,40,56	_	_	1	0	0	0	1	1
32,33,34,35	1	0	0	0	_	_	1	1
32,33,36,37	1	0	0	_	0	_	1	1
32,34,36,38	1	0	0	_	_	0	1	1
32,34,40,42	1	0		0	_	0	1	1
32,36,40,44	1	0	_	_	0	0	1	1
3,7,11,15	0	0	_	_	1	1	1	2
3,7,35,39		0	0	_	1	1	1	2
5,7,13,15	0	0		1		1	1	2
5,7,37,39		0	- 0	1	_	1	1	2
5,13,37,45	_	0		1	- 0	1	1	2
6,7,14,15	0	0	_	1	1	-	1	2
6,7,38,39		0	0	1	1	_	1	2
6,14,38,46	_	0		1	1	0	1	2
<i>□,</i> ±¬,□∪, <del>+</del> ∪	l <b>–</b>		l <b>–</b>		l		l	

9,11,13,15	0	0	1	_	_	1	1	2
10,11,14,15	0	0	1		1		1	2
10,11,26,27	0	_	1	0	1		1	2
10,14,26,30	0		1		1	0	1	2
10,14,42,46		0	1		1	0	1	2
10,26,42,58			1	0	1	0	1	2
12,13,14,15	0	0	1	1	_	_	1	2
12,13,44,45	_	0	1	1	0		1	2
12,14,44,46	_	0	1	1	_	0	1	2
24,26,56,58	_	1	1	0	_	0	1	2
33,35,37,39	1	0	0	_	_	1	1	2
34,35,38,39	1	0	0	_	1	_	1	2
34,38,42,46	1	0	_	_	1	0	1	2
34,42,50,58	1	_	ı	0	1	0	1	2
36,37,38,39	1	0	0	1	1	_	1	2
36,37,44,45	1	0	ı	1	0	_	1	2
36,38,44,46	1	0	-	1	-	0	1	2
40,42,44,46	1	0	1	ı	ı	0	1	2
40,42,56,58	1	ı	1	0	ı	0	1	2
7,15,39,47	-	0	ı	1	1	1	1	3
11,15,27,31	0	_	1	ı	1	1	1	3
13,15,29,31	0	_	1	1	ı	1	1	3
13,15,45,47	_	0	1	1	ı	1	1	3
13,29,45,61	_	_	1	1	0	1	1	3
14,15,30,31	0	_	1	1	1	_	1	3
14,15,46,47	_	0	1	1	1	_	1	3
14,30,46,62	_	_	1	1	1	0	1	3
26,27,30,31	0	1	1	_	1	_	1	3
26,30,58,62	_	1	1	_	1	0	1	3
37,39,45,47	1	0	_	1	_	1	1	3
37,45,53,61	1	_	_	1	0	1	1	3
38,39,46,47	1	0	_	1	1	_	1	3
42,46,58,62	1	_	1	_	1	0	1	3
44,45,46,47	1	0	1	1	_	_	1	3
15,31,47,63	_	_	1	1	1	1	1	4
29,31,61,63	_	1	1	1	_	1	1	4
30,31,62,63	_	1	1	1	1	_	1	4
45,47,61,63	1	_	1	1	_	1	1	4
46,47,62,63	1	_	1	1	1	_	1	4

DC İÇİN 3. SEVİYE

DC IÇIN 3. SEV	IYE							
No	Х3	X2	X1	Α	В	С	DC	Gruplar
0,1,2,3,4,5,6,7	0	0	0	_	_	_	1	0
0,1,2,3,8,9,10,11	0	0	_	0	_	_	1	0
0,1,2,3,32,33,34,35	_	0	0	0	_	_	1	0
0,1,4,5,8,9,12,13	0	0	_	_	0	_	1	0
0,1,4,5,32,33,36,37	_	0	0	_	0	_	1	0
0,2,4,6,8,10,12,14	0	0	_	_	_	0	1	0
0,2,4,6,32,34,36,38	_	0	0	_	_	0	1	0
0,2,8,10,32,34,40,42	_	0	_	0	_	0	1	0
0,4,8,12,32,36,40,44	_	0	_	_	0	0	1	0
1,3,5,7,9,11,13,15	0	0	_	_	_	1	1	1
1,3,5,7,33,35,37,39	_	0	0	_	_	1	1	1
2,3,6,7,10,11,14,15	0	0	_	_	1	_	1	1
2,3,6,7,34,35,38,39	_	0	0	_	1	_	1	1
2,6,10,14,34,38,42,46	_	0	_	_	1	0	1	1
4,5,6,7,12,13,14,15	0	0	_	1	_	_	1	1
4,5,6,7,36,37,38,39	_	0	0	1	_	_	1	1
4,5,12,13,36,37,44,45	_	0	_	1	0	_	1	1
4,6,12,14,36,38,44,46	_	0	_	1	_	0	1	1
8,9,10,11,12,13,14,15	0	0	1	_	_	_	1	1
8,10,12,14,40,42,44,46	_	0	1	_	_	0	1	1
8,10,24,26,40,42,56,58	_	_	1	0	_	0	1	1
32,33,34,35,36,37,38,39	1	0	0	_	_	_	1	1
32,34,36,38,40,42,44,46	1	0	_	_	_	0	1	1
5,7,13,15,37,39,45,47	_	0	_	1	_	1	1	2
6,7,14,15,38,39,46,47	_	0	_	1	1	_	1	2
10,11,14,15,26,27,30,31	0	_	1	_	1	_	1	2
10,14,26,30,42,46,58,62	_	_	1	_	1	0	1	2
12,13,14,15,44,45,46,47	_	0	1	1	_	_	1	2
36,37,38,39,44,45,46,47	1	0	_	1			1	2
13,15,29,31,45,47,61,63	_	_	1	1	_	1	1	3
14,15,30,31,46,47,62,63	_	_	1	1	1	_	1	3

#### DC İÇİN 4. SEVİYE

No	Х3	X2	X1	Α	В	С	DC	Gruplar
0,1,2,3,4,5,6,7,8,9,10,11,12,13,14,15	0	0	ı				1	0
0,1,2,3,4,5,6,7,32,33,34,35,36,37,38,39	-	0	0	-	-	-	1	0
0,2,4,6,8,10,12,14,32,34,36,38,40,42,44,46	_	0	_	_	_	0	1	0
4,5,6,7,12,13,14,15,36,37,38,39,44,45,46,47	_	0	_	1	_	_	1	1

### DC İÇİN FORMÜL

No	Х3	X2	X1	Α	В	С
9	0	0	1	0	0	1
0,1,2,3,4,5,6,7,32,33,34,35,36,37,38,39	_	0	0	-	-	-
8,10,12,14,40,42,44,46		0	1			0
13,15,29,31,45,47,61,63	_	_	1	1		1
24,26,56,58	_	1	1	0	_	0
11,27	0		1	0	1	1
30,62	_	1	1	1	1	0
50	1	1	0	0	1	0
53	1	1	0	1	0	1

!X3!X2X1!A!BC + !X2!X1 + !X2X1!C + X1AC + X2X1!A!C + !X3X1!ABC + X2X1AB!C + X3X2!X1!ABIC + X3X2!X1A!BC

# A1K İÇİN 1. SEVİYE

No	Х3	X2	X1	А	В	С	A1K	Gruplar
0,1	0	0	0	0	0		1	0
0,2	0	0	0	0		0	1	0
0,4	0	0	0		0	0	1	0
0,16	0		0	0	0	0	1	0
0,32		0	0	0	0	0	1	0
1,3	0	0	0	0		1	1	1
1,5	0	0	0		0	1	1	1
1,17	0	_	0	0	0	1	1	1
1,33		0	0	0	0	1	1	1
2,3	0	0	0	0	1	_	1	1
2,6	0	0	0	_	1	0	1	1
2,18	0	_	0	0	1	0	1	1
2,34	ı	0	0	0	1	0	1	1
4,5	0	0	0	1	0	-	1	1
4,6	0	0	0	1	_	0	1	1
4,20	0	_	0	1	0	0	1	1
4,36	_	0	0	1	0	0	1	1
16,17	0	1	0	0	0	_	1	1
16,18	0	1	0	0	_	0	1	1
16,20	0	1	0	_	0	0	1	1
16,48	_	1	0	0	0	0	1	1
32,33	1	0	0	0	0	_	1	1
32,34	1	0	0	0	_	0	1	1
32,36	1	0	0	_	0	0	1	1
32,48	1	_	0	0	0	0	1	1
3,7	0	0	0	_	1	1	1	2
3,19	0	_	0	0	1	1	1	2
3,35	_	0	0	0	1	1	1	2
5,7	0	0	0	1	_	1	1	2
5,21	0	_	0	1	0	1	1	2
5,37	_	0	0	1	0	1	1	2
6,7	0	0	0	1	1	_	1	2
6,22	0		0	1	1	0	1	2
6,38	_	0	0	1	1	0	1	2
17,19	0	1	0	0	_	1	1	2
17,21	0	1	0	_	0	1	1	2
17,49		1	0	0	0	1	1	2
18,19	0	1	0	0	1	_	1	2
18,22	0	1	0		1	0	1	2
18,26	0	1	_	0	1	0	1	2
18,50	_	1	0	0	1	0	1	2
20,21	0	1	0	1	0		1	2
20,22	0	1	0	1		0	1	2
20,28	0	1		1	0	0	1	2
20,52	_	1	0	1	0	0	1	2

33,35	1	0	0	О		1	1	2
33,37	1	0	0		0	1	1	2
33,49	1		0	0	0	1	1	2
34,35	1	0	0	0	1	_	1	2
34,38	1	0	0		1	0	1	2
34,50	1		0	0	1	0	1	2
36,37	1	0	0	1	0		1	2
36,38	1	0	0	1		- 0	1	2
36,44	1	0		1	0	0	1	2
36,52	1		0	1	0	0	1	2
48,49	1	1	0	0	0		1	2
48,50	1	1	0	0		- 0	1	2
48,52	1	1	0		0	0	1	2
7,23	0		0	1	1	1	1	3
7,39		0	0	1	1	1	1	3
19,23	0	1	0		1	1	1	3
19,51		1	0	0	1	1	1	3
21,23	0	1	0	1		1	1	3
21,53		1	0	1	0	1	1	3
22,23	0	1	0	1	1		1	3
22,54		1	0	1	1	- 0	1	3
26,58	_	1	1	0	1	0	1	3
28,60	_	1	1	1	0	0	1	3
35,39	1	0	0		1	1	1	3
35,43	1	0		0	1	1	1	3
35,51	1	_	0	0	1	1	1	3
37,39	1	0	0	1	_	1	1	3
37,53	1	_	0	1	0	1	1	3
38,39	1	0	0	1	1	_	1	3
38,54	1	_	0	1	1	0	1	3
44,60	1	_	1	1	0	0	1	3
49,51	1	1	0	0	_	1	1	3
49,53	1	1	0	_	0	1	1	3
50,51	1	1	0	0	1	_	1	3
50,54	1	1	0	_	1	0	1	3
50,58	1	1	_	0	1	0	1	3
52,53	1	1	0	1	0	_	1	3
52,54	1	1	0	1	_	0	1	3
52,60	1	1	_	1	0	0	1	3
23,55	_	1	0	1	1	1	1	4
39,55	1	_	0	1	1	1	1	4
43,59	1	_	1	0	1	1	1	4
51,55	1	1	0	_	1	1	1	4
51,59	1	1	_	0	1	1	1	4
53,55	1	1	0	1	_	1	1	4
53,61	1	1	_	1	0	1	1	4
54,55	1	1	0	1	1	_	1	4
58,59	1	1	1	0	1	_	1	4
60,61	1	1	1	1	0	_	1	4

# A1K İÇİN 2. SEVİYE

No	Х3	X2	X1	А	В	С	A1K	Gruplar
0,1,2,3	0	0	0	0	_	_	1	0
0,1,4,5	0	0	0	ı	0	ı	1	0
0,1,16,17	0	_	0	0	0	_	1	0
0,1,32,33	_	0	0	0	0	_	1	0
0,2,4,6	0	0	0	_	_	0	1	0
0,2,16,18	0	_	0	0	_	0	1	0
0,2,32,34	_	0	0	0	_	0	1	0
0,4,16,20	0	_	0	_	0	0	1	0
0,4,32,36	_	0	0	_	0	0	1	0
0,16,32,48	_	_	0	0	0	0	1	0
1,3,5,7	0	0	0	_	_	1	1	1
1,3,17,19	0	_	0	0	_	1	1	1
1,3,33,35	_	0	0	0	_	1	1	1
1,5,17,21	0	_	0	_	0	1	1	1
1,5,33,37	_	0	0	_	0	1	1	1
1,17,33,49	_	_	0	0	0	1	1	1
2,3,6,7	0	0	0	_	1	_	1	1
2,3,18,19	0	_	0	0	1	_	1	1
2,3,34,35	_	0	0	0	1	_	1	1
2,6,18,22	0	_	0	_	1	0	1	1
2,6,34,38		0	0	_	1	0	1	1
2,18,34,50	_	_	0	0	1	0	1	1
4,5,6,7	0	0	0	1	_	_	1	1
4,5,20,21	0	_	0	1	0	_	1	1
4,5,36,37	_	0	0	1	0	_	1	1
4,6,20,22	0	_	0	1	_	0	1	1
4,6,36,38	_	0	0	1	_	0	1	1
4,20,36,52	_	_	0	1	0	0	1	1
16,17,18,19	0	1	0	0	_	_	1	1
16,17,20,21	0	1	0	_	0	_	1	1
16,17,48,49	_	1	0	0	0	_	1	1
16,18,20,22	0	1	0	_	_	0	1	1
16,18,48,50	_	1	0	0	_	0	1	1
16,20,48,52	_	1	0	_	0	0	1	1
32,33,34,35	1	0	0	0	_	_	1	1
32,33,36,37	1	0	0	_	0	_	1	1
32,33,48,49	1	_	0	0	0	_	1	1
32,34,36,38	1	0	0	_	_	0	1	1
32,34,48,50	1	_	0	0	_	0	1	1
32,36,48,52	1	_	0	_	0	0	1	1
3,7,19,23	0		0	_	1	1	1	2
3,7,35,39	_	0	0		1	1	1	2
3,19,35,51		_	0	0	1	1	1	2
5,7,21,23	0		0	1	_	1	1	2
5,7,37,39	_	0	0	1	_	1	1	2

5,21,37,53	_	_	0	1	0	1	1	2
6,7,22,23	0	_	0	1	1	_	1	2
6,7,38,39	_	0	0	1	1	_	1	2
6,22,38,54	_	_	0	1	1	0	1	2
17,19,21,23	0	1	0	_	_	1	1	2
17,19,49,51	_	1	0	0	_	1	1	2
17,21,49,53	_	1	0	_	0	1	1	2
18,19,22,23	0	1	0	-	1	ı	1	2
18,19,50,51	-	1	0	0	1	ı	1	2
18,22,50,54	_	1	0	_	1	0	1	2
18,26,50,58	-	1	-	0	1	0	1	2
20,21,22,23	0	1	0	1	ı	ı	1	2
20,21,52,53	_	1	0	1	0	_	1	2
20,22,52,54	_	1	0	1	_	0	1	2
20,28,52,60	_	1	_	1	0	0	1	2
33,35,37,39	1	0	0	_	_	1	1	2
33,35,49,51	1	_	0	0	-	1	1	2
33,37,49,53	1	_	0	_	0	1	1	2
34,35,38,39	1	0	0	_	1	_	1	2
34,35,50,51	1	_	0	0	1	_	1	2
34,38,50,54	1	_	0	_	1	0	1	2
36,37,38,39	1	0	0	1	_	_	1	2
36,37,52,53	1	_	0	1	0	_	1	2
36,38,52,54	1	_	0	1	_	0	1	2
36,44,52,60	1	_	_	1	0	0	1	2
48,49,50,51	1	1	0	0	_	_	1	2
48,49,52,53	1	1	0	_	0	_	1	2
48,50,52,54	1	1	0	_	1	0	1	2
7,23,39,55	_	_	0	1	1	1	1	3
19,23,51,55	_	1	0	_	1	1	1	3
21,23,53,55	_	1	0	1	_	1	1	3
22,23,54,55	_	1	0	1	1	_	1	3
35,39,51,55	1	_	0	_	1	1	1	3
35,43,51,59	1	_	_	0	1	1	1	3
37,39,53,55	1	_	0	1	_	1	1	3
38,39,54,55	1	_	0	1	1	_	1	3
49,51,53,55	1	1	0	_	_	1	1	3
50,51,54,55	1	1	0	_	1	_	1	3
50,51,58,59	1	1	_	0	1	_	1	3
52,53,54,55	1	1	0	1	_	_	1	3
52,53,60,61	1	1		1	0		1	3

## A1K İÇİN 3. SEVİYE

No	Х3		X2		X1	Α	В	С	A1K	Gruplar
0,1,2,3,4,5,6,7		0		0	0	_	_	_	1	0
0,1,2,3,16,17,18,19		0			0	0	_	_	1	0
0,1,2,3,32,33,34,35	_			0	0	0		_	1	0
0,1,4,5,16,17,20,21		0			0	_	0	_	1	0
0,1,4,5,32,33,36,37	_			0	0	_	0	_	1	0
0,1,16,17,32,33,48,49	_		_		0	0	0	_	1	0
0,2,4,6,16,18,20,22		0	_		0	_		0	1	0
0,2,4,6,32,34,36,38	_			0	0	_		0	1	0
0,2,16,18,32,34,48,50	-		_		0	0	_	0	1	0
0,4,16,20,32,36,48,52	_		_		0	_	0	0	1	0
1,3,5,7,17,19,21,23		0	_		0	_	_	1	1	1
1,3,5,7,33,35,37,39	-			0	0	-	_	1	1	1
1,3,17,19,33,35,49,51	_		ı		0	0	_	1	1	1
1,5,17,21,33,37,49,53	_		ı		0	ı	0	1	1	1
2,3,6,7,18,19,22,23		0	ı		0	-	1	-	1	1
2,3,6,7,34,35,38,39	_			0	0	_	1	_	1	1
2,3,18,19,34,35,50,51	_		ı		0	0	1	ı	1	1
2,6,18,22,34,38,50,54	_		ı		0	ı	1	0	1	1
4,5,6,7,20,21,22,23		0	ı		0	1	_	-	1	1
4,5,6,7,36,37,38,39	_			0	0	1	_	_	1	1
4,5,20,21,36,37,52,53	_		_		0	1	0	_	1	1
4,6,20,22,36,38,52,54	_				0	1	_	0	1	1
16,17,18,19,20,21,22,23		0		1	0	_	_	_	1	1
16,17,18,19,48,49,50,51	_			1	0	0	_	_	1	1
16,17,20,21,48,49,52,53	_			1	0	_	0	_	1	1
16,18,20,22,48,50,52,54	_			1	0	_	_	0	1	1
32,33,34,35,36,37,38,39		1		0	0	_	_	_	1	1
32,33,34,35,48,49,50,51		1	_		0	0	_	_	1	1
32,33,36,37,48,49,52,53		1	_		0	_	0	_	1	1
32,34,36,38,48,50,52,54		1	_		0	_	_	0	1	1
3,7,19,23,35,39,51,55	_		_		0	_	1	1	1	2
5,7,21,23,37,39,53,55	_		_		0	1	_	1	1	2
6,7,22,23,38,39,54,55	_		_		0	1	1	_	1	2
17,19,21,23,49,51,53,55	_			1	0	_	_	1	1	2
18,19,22,23,50,51,54,55	_			1	0	_	1	_	1	2
20,21,22,23,52,53,54,55	_			1	0	1	_	_	1	2
33,35,37,39,49,51,53,55		1	_		0		_	1	1	2
34,35,38,39,50,51,54,55		1	_		0	_	1	_	1	2
36,37,38,39,52,53,54,55		1	_		0	1	_	_	1	2
48,49,50,51,52,53,54,55		1		1	0	_	_	_	1	2

#### A1K İÇİN 4. SEVİYE

No	Х3	X2	X1	Α	В	С	A1K	Gruplar
0,1,2,3,4,5,6,7,16,17,18,19,20,21,22,23	0	_	0				1	0
0,1,2,3,4,5,6,7,32,33,34,35,36,37,38,39	_	0	0				1	0
0,1,2,3,16,17,18,19,32,33,34,35,48,49,50,51	_	_	0	0	_	_	1	0
0,1,4,5,16,17,20,21,32,33,36,37,48,49,52,53	_	_	0	-	0	-	1	0
0,2,4,6,16,18,20,22,32,34,36,38,48,50,52,54	_	_	0	_	_	0	1	0
1,3,5,7,17,19,21,23,33,35,37,39,49,51,53,55	_	_	0	_	_	1	1	1
2,3,6,7,18,19,22,23,34,35,38,39,50,51,54,55	_	_	0	_	1	_	1	1
4,5,6,7,20,21,22,23,36,37,38,39,52,53,54,55	_	_	0	1	_	_	1	1
16,17,18,19,20,21,22,23,48,49,50,51,52,53,54,55	_	1	0	_	_	_	1	1
32,33,34,35,36,37,38,39,48,49,50,51,52,53,54,55	1	_	0	_	_	_	1	1

#### A1K İÇİN 5. SEVİYE

No	Х3	X2	X1	Α	В	С	A1K	Gruplar
0,1,2,3,4,5,6,7,16,17,18,19,20,21,22,23,32,33								
,34,35,36,37,38,39,48,49,50,51,52,53,54,55	_	_	0	_	_	_	1	0

### A1K İÇİN FORMÜL

No	Х3	X2	X1	Α	В	С
28	0	1	1	1	0	0
0,1,2,3,4,5,6,7,16,17,18,19,20,21,22,23,32,33,34,35,36,37,38,39,48,49,50,51,52,53,54,55			0			
26,58	_	1	1	0	1	0
43,59	1	-	1	0	1	1
44,6	1		1	1	0	0
61	1	1	1	1	0	1

!X3X2X1A!B!C + !X1 + X2X1!AB!C + X3X1!ABC + X3X1A!B!C + X3X2X1A!BC

### A1S İÇİN 1. SEVİYE

No	Х3	X2	X1	Α	В	С	A1S	Gruplar
25,57	ı	1	1	0	0	1	1	0
41,57	1	_	1	0	0	1	1	0

No	Х3	X2	X1	Α	В	С
25	0	1	1	0	0	1
41,57	1		1	0	0	1

!X3X2X1!A!BC + X3X1!A!BC

A1Y İÇİN 1. SEVİYE

No	X3	X2	X1	Α	В	С	A1Y	Gruplar
8,9	0	0	1	0	0		1	0
8,10	0	0	1	0		0	1	0
8,12	0	0	1		0	0	1	0
8,24	0		1	0	0	0	1	0
8,40		- 0	1	0	0	0	1	0
9,11	0	0	1	0	_	1	1	1
9,13	0	0	1	_	0	1	1	1
10,11	0	0	1	0	1	_	1	1
10,14	0	0	1	_	1	0	1	1
10,42	ı	0	1	0	1	0	1	1
12,13	0	0	1	1	0	ı	1	1
12,14	0	0	1	1	1	0	1	1
24,56	_	1	1	0	0	0	1	1
40,42	1	0	1	0	_	0	1	1
40,56	1	_	1	0	0	0	1	1
11,15	0	0	1	_	1	1	1	2
11,27	0	_	1	0	1	1	1	2
13,15	0	0	1	1	_	1	1	2
13,29	0	_	1	1	0	1	1	2
13,45	_	0	1	1	0	1	1	2
14,15	0	0	1	1	1	_	1	2
14,30	0	_	1	1	1	0	1	2
14,46	_	0	1	1	1	0	1	2
42,46	1	0	1	_	1	0	1	2
15,31	0	_	1	1	1	1	1	3
15,47	_	0	1	1	1	1	1	3
27,31	0	1	1	_	1	1	1	3
29,31	0	1	1	1	_	1	1	3
30,31	0	1	1	1	1	_	1	3
30,62	_	1	1	1	1	0	1	3
45,47	1	0	1	1		1	1	3
46,47	1	0	1	1	1	_	1	3
46,62	1	_	1	1	1	0	1	3
31,63	_	1	1	1	1	1	1	4
47,63	1	_	1	1	1	1	1	4
62,63	1	1	1	1	1	_	1	4

A1Y İÇİN 2. SEVİYE

No	Х3	X2	X1	А	В	С	A1Y	Gruplar
8,9,10,11	0	0	1	0	ı	_	1	0
8,9,12,13	0	0	1	_	0	_	1	0
8,10,12,14	0	0	1	_	ı	0	1	0
8,10,40,42	_	0	1	0	ı	0	1	0
8,24,40,56	_	_	1	0	0	0	1	0
9,11,13,15	0	0	1	_	ı	1	1	1
10,11,14,15	0	0	1	_	1	_	1	1
10,14,42,46	_	0	1	_	1	0	1	1
12,13,14,15	0	0	1	1	ı	-	1	1
11,15,27,31	0	_	1	_	1	1	1	2
13,15,29,31	0	_	1	1	ı	1	1	2
13,15,45,47	ı	0	1	1	ı	1	1	2
14,15,30,31	0	-	1	1	1	-	1	2
14,15,46,47	ı	0	1	1	1	ı	1	2
14,30,46,62	-	-	1	1	1	0	1	2
15,31,47,63	_	_	1	1	1	1	1	3
30,31,62,63	_	1	1	1	1	_	1	3
46,47,62,63	1	_	1	1	1	_	1	3

### A1Y İÇİN 3. SEVİYE

No	Х3	X2	X1	Α	В	С	A1Y	Gruplar
8,9,10,11,12,13,14,15	0	0	1	-	-	-	1	0
14,15,30,31,46,47,62,63	-	-	1	1	1	-	1	2

### A1Y İÇİN FORMÜL

No	Х3	X2	X1	Α	В	С
9	0	0	1	0	0	1
14,15,30,31,46,47,62,63	-	_	1	1	1	
8,10,40,42	ı	0	1	0	ı	0
11,27	0		1	0	1	1
12,13	0	0	1	1	0	_
24,56		1	1	0	0	0
29	0	1	1	1	0	1
45	1	0	1	1	0	1

!X3!X2X1!A!BC + X1AB + !X2X1!A!C + !X3X1!ABC + !X3!X2X1A!B + X2X1!A!B!C + !X3X2X1A!BC + X3!X2X1A!BC

No	٧2	va	X1	^	В	_	<b>42</b> 1/	Crupler
No 0.1	X3	X2		Α	В	С	A2K	Gruplar
0,1	0	0	0	0	0		1	0
0,2	0	0	0	0	_	0	1	0
0,4	0	0	0	_	0	0	1	0
0,8	0	0	_	0	0	0	1	0
0,32	_	0	0	0	0	0	1	0
1,3	0	0	0	0	_	1	1	1
1,5	0	0	0	_	0	1	1	1
1,9	0	0	_	0	0	1	1	1
1,33	-	0	0	0	0	1	1	1
2,3	0	0	0	0	1	_	1	1
2,6	0	0	0	-	1	0	1	1
2,10	0	0	_	0	1	0	1	1
2,34		0	0	0	1	0	1	1
4,5	0	0	0	1	0		1	1
4,6	0	0	0	1		0	1	1
4,12	0	0		1	0	0	1	1
4,36		0	-0	1	0	0	1	1
8,9	0	0	1	0	0		1	1
8,10	0	0	1	0		0	1	1
8,12	0	0	1		0	0	1	1
8,24	0		1	0	0	0	1	1
8,40		0	1	0	0	0	1	1
32,33	1	0	0	0	0	Ť	1	1
32,34	1	0	0	0	Ť	0	1	1
32,36	1	0	0		0	0	1	1
32,40	1	0		0	0	0	1	1
	0	0	0		1	1	1	2
3,7 3,11	0	0	0	0	1	1	1	2
	0	0	0	0	1	1	1	2
3,35 5,7	0	0	0	1		1	1	2
			U		_	1	1	2
5,13	0	0	_	1	0	1		
5,37	_	0	0	1	0		1	2
6,7	0	0	0	1	1	_	1	2
6,14	0	0	_	1	1	0	1	2
6,38		0	0	1	1	0	1	2
9,11	0	0	1	0	_	1	1	2
9,13	0	0	1	_	0	1	1	2
9,25	0		1	0	0	1	1	2
9,41	_	0	1	0	0	1	1	2
10,11	0	0	1	0	1		1	2
10,14	0	0	1	_	1	0	1	2
10,42	_	0	1	0	1	0	1	2
12,13	0	0	1	1	0		1	2
12,14	0	0	1	1		0	1	2
12,44	_	0	1	1	0	0	1	2
24,25	0	1	1	0	0	_	1	2

24,56		1	1	0	0	0	1	2
33,35	1	0	0	0		1	1	2
33,37	1	0	0		0	1	1	2
33,41	1	0		0	0	1	1	2
34,35	1	0	0	0	1		1	2
34,38	1	0	0		1	0	1	2
34,42	1	0		0	1	0	1	2
36,37	1	0	0	1	0		1	2
36,38	1	0	0	1		0	1	2
36,44	1	0		1	0	0	1	2
40,41	1	0		0	0		1	2
40,42	1	0	1	0		0	1	2
40,44	1	0	1		0	0	1	2
40,56	1		1	0	0	0	1	2
7,15	0	0		1	1	1	1	3
7,39		0	0	1	1	1	1	3
11,15	0	0	1		1	1	1	3
11,27	0		1	0	1	1	1	3
11,43		0	1	0	1	1	1	3
13,15	0	0	1	1		1	1	3
13,29	0	_	1	1	0	1	1	3
13,45		0	1	1	0	1	1	3
14,15	0	0	1	1	1		1	3
14,30	0		1	1	1	0	1	3
14,46		0	1	1	1	0	1	3
25,27	0	1	1	0		1	1	3
25,29	0	1	1		0	1	1	3
25,57		1	1	0	0	1	1	3
35,39	1	0	0		1	1	1	3
35,43	1	0		0	1	1	1	3
35,51	1	_	0	0	1	1	1	3
37,39	1	0	0	1		1	1	3
37,45	1	0		1	0	1	1	3
37,53	1		0	1	0	1	1	3
38,39	1	0	0	1	1	_	1	3
38,46	1	0	_	1	1	0	1	3
41,43	1	0	1	0	_	1	1	3
41,45	1	0	1		0	1	1	3
41,57	1		1	0	0	1	1	3
42,43	1	0	1	0	1	_	1	3
42,46	1	0	1		1	0	1	3
44,45	1	0	1	1	0		1	3
44,46	1	0	1	1		0	1	3
56,57	1	1	1	0	0	_	1	3
15,31	0		1	1	1	1	1	4
15,47	_	0	1	1	1	1	1	4
27,31	0	1	1	_	1	1	1	4
27,59		1	1	0	1	1	1	4
29,31	0	1	1	1		1	1	4

20.64	1			_	٦	ا ا		۱ .
29,61	_	1	1	1	0	1	1	4
30,31	0	1	1	1	1	_	1	4
30,62	_	1	1	1	1	0	1	4
39,47	1	0	_	1	1	1	1	4
43,47	1	0	1	ı	1	1	1	4
43,59	1	-	1	0	1	1	1	4
45,47	1	0	1	1		1	1	4
45,61	1	ı	1	1	0	1	1	4
46,47	1	0	1	1	1	ı	1	4
46,62	1	-	1	1	1	0	1	4
51,59	1	1	ı	0	1	1	1	4
53,61	1	1	1	1	0	1	1	4
57,59	1	1	1	0	-	1	1	4
57,61	1	1	1	-	0	1	1	4
31,63		1	1	1	1	1	1	5
47,63	1	_	1	1	1	1	1	5
59,63	1	1	1	_	1	1	1	5
61,63	1	1	1	1	_	1	1	5
62,63	1	1	1	1	1	_	1	5

No	Х3	X2	X1	А	В	С	A2K	Gruplar
0,1,2,3	0	0	0	0	_	_	1	0
0,1,4,5	0	0	0		0		1	0
0,1,8,9	0	0		0	0	_	1	0
0,1,32,33		0	0	0	0	_	1	0
0,2,4,6	0	0	0			0	1	0
0,2,8,10	0	0		0	_	0	1	0
0,2,32,34		0	0	0	_	0	1	0
0,4,8,12	0	0			0	0	1	0
0,4,32,36		0	0	_	0	0	1	0
0,8,32,40	_	0		0	0	0	1	0
1,3,5,7	- 0	0	0			1	1	1
1,3,9,11	0	0		0		1	1	1
1,3,33,35		0	0	0		1	1	1
1,5,9,13	- 0	0			- 0	1	1	1
1,5,33,37		0	0	_	0	1	1	1
1,9,33,41		0		0	0	1	1	1
2,3,6,7	- 0	0	0		1		1	1
2,3,10,11	0	0		0	1		1	1
2,3,34,35		0	0	0	1		1	1
2,6,10,14	- 0	0	_		1	0	1	1
2,6,34,38		0	0	_	1	0	1	1
2,10,34,42	_	0	_	0	1	0	1	1
4,5,6,7	0	0	0	1			1	1
4,5,12,13	0	0		1	0		1	1
4,5,36,37		0	0	1	0	_	1	1
4,6,12,14	0	0		1		- 0	1	1
4,6,36,38		0	0	1	_	0	1	1
4,12,36,44	_	0		1	- 0	0	1	1
8,9,10,11	0	0	1	0			1	1
8,9,12,13	0	0	1		0	_	1	1
8,9,24,25	0	_	1	0	0	_	1	1
8,9,40,41	_	0	1	0	0	_	1	1
8,10,12,14	0	0	1	_	_	0	1	1
8,10,40,42	_	0	1	0		0	1	1
8,12,40,44	_	0	1	_	0	0	1	1
8,24,40,56		_	1	0	0	0	1	1
32,33,34,35	1	0	0	0	_	_	1	1
32,33,36,37	1	0	0	_	0	_	1	1
32,33,40,41	1	0	_	0	0	_	1	1
32,34,36,38	1	0	0	_	_	0	1	1
32,34,40,42	1	0	_	0	_	0	1	1
32,36,40,44	1	0	_	_	0	0	1	1
3,7,11,15	0	0	_	_	1	1	1	2
3,7,35,39	_	0	0	_	1	1	1	2
3,11,35,43	_	0	_	0	1	1	1	2
5,7,13,15	0	0	_	1	_	1	1	2

5,7,37,39		0	0	1		1	1	2
5,13,37,45		0		1	- 0	1	1	2
6,7,14,15	- 0	0	_	1	1		1	2
6,7,38,39		0	0	1	1	_	1	2
6,14,38,46	_	0		1	1	0	1	2
9,11,13,15	0	0	1			1	1	2
9,11,25,27	0		1	0	_	1	1	2
9,11,41,43		0	1	0	_	1	1	2
9,13,25,29	0		1		0	1	1	2
9,13,41,45		0	1	_	0	1	1	2
9,25,41,57	_		1	0	0	1	1	2
10,11,14,15	- 0	- 0	1		1		1	2
10,11,42,43		0	1	0	1	_	1	2
10,14,42,46	_	0	1		1	0	1	2
12,13,14,15	0	0	1	1			1	2
12,13,44,45		0	1	1	0		1	2
12,14,44,46	_	0	1	1	_	0	1	2
24,25,56,57		1	1	0	0	_	1	2
33,35,37,39	1	0	0	_	_	1	1	2
33,35,41,43	1	0	_	0	_	1	1	2
33,37,41,45	1	0	_	_	0	1	1	2
34,35,38,39	1	0	0	_	1	_	1	2
34,35,42,43	1	0	_	0	1	_	1	2
34,38,42,46	1	0	_	_	1	0	1	2
36,37,38,39	1	0	0	1	ı	ı	1	2
36,37,44,45	1	0	ı	1	0	ı	1	2
36,38,44,46	1	0	_	1	_	0	1	2
40,41,42,43	1	0	1	0	_	_	1	2
40,41,44,45	1	0	1	_	0	_	1	2
40,41,56,57	1	_	1	0	0	_	1	2
40,42,44,46	1	0	1	_	_	0	1	2
7,15,39,47	_	0	_	1	1	1	1	3
11,15,27,31	0	_	1	_	1	1	1	3
11,15,43,47	_	0	1	_	1	1	1	3
11,27,43,59	_	_	1	0	1	1	1	3
13,15,29,31	0	_	1	1	_	1	1	3
13,15,45,47	_	0	1	1	_	1	1	3
13,29,45,61	_	_	1	1	0	1	1	3
14,15,30,31	0	_	1	1	1	_	1	3
14,15,46,47	_	0	1	1	1	_	1	3
14,30,46,62	_	_	1	1	1	0	1	3
25,27,29,31	0	1	1	_	_	1	1	3
25,27,57,59		1	1	0		1	1	3
25,29,57,61		1	1		0	1	1	3
35,39,43,47	1	0	_	_	1	1	1	3
35,43,51,59	1			0	1	1	1	3
37,39,45,47	1	0	_	1	_	1	1	3
37,45,53,61	1	_	_	1	0	1	1	3
38,39,46,47	1	0	_	1	1	<u> </u>	1	3

41,43,45,47	1	0	1	_	_	1	1	3
41,43,57,59	1	_	1	0	_	1	1	3
41,45,57,61	1	-	1	ı	0	1	1	3
42,43,46,47	1	0	1	ı	1	ı	1	3
44,45,46,47	1	0	1	1	-	ı	1	3
15,31,47,63	_	_	1	1	1	1	1	4
27,31,59,63	_	1	1	ı	1	1	1	4
29,31,61,63	_	1	1	1	_	1	1	4
30,31,62,63	_	1	1	1	1	ı	1	4
43,47,59,63	1	_	1	ı	1	1	1	4
45,47,61,63	1	_	1	1	_	1	1	4
46,47,62,63	1	_	1	1	1	-	1	4
57,59,61,63	1	1	1	_	_	1	1	4

No	Х3		X2		X1		Α		В		С		A2K	Gruplar
0,1,2,3,4,5,6,7		0		0		0	_		1		-		1	0
0,1,2,3,8,9,10,11		0		0				0			_		1	0
0,1,2,3,32,33,34,35	_			0		0		0	_		_		1	0
0,1,4,5,8,9,12,13		0		0	_		1			0	_		1	0
0,1,4,5,32,33,36,37	_			0		0	ı			0	-		1	0
0,1,8,9,32,33,40,41	_			0	-			0		0	ı		1	0
0,2,4,6,8,10,12,14		0		0			_		ı			0	1	0
0,2,4,6,32,34,36,38	_			0		0			ı			0	1	0
0,2,8,10,32,34,40,42				0	_			0	ı			0	1	0
0,4,8,12,32,36,40,44				0			_			0		0	1	0
1,3,5,7,9,11,13,15		0		0	_		_		_			1	1	1
1,3,5,7,33,35,37,39	_			0		0	_		_			1	1	1
1,3,9,11,33,35,41,43	_			0	_			0	ı			1	1	1
1,5,9,13,33,37,41,45	_			0	_		_			0		1	1	1
2,3,6,7,10,11,14,15		0		0	_		_			1	_		1	1
2,3,6,7,34,35,38,39				0		0	_			1	_		1	1
2,3,10,11,34,35,42,43				0	_			0		1	_		1	1
2,6,10,14,34,38,42,46				0	_		_			1		0	1	1
4,5,6,7,12,13,14,15		0		0	_			1	_		_		1	1
4,5,6,7,36,37,38,39				0		0		1	_		_		1	1
4,5,12,13,36,37,44,45				0	_			1		0	_		1	1
4,6,12,14,36,38,44,46				0	_			1	_			0	1	1
8,9,10,11,12,13,14,15	L	0		0		1			_		_		1	1
8,9,10,11,40,41,42,43				0		1		0	ı		_		1	1
8,9,12,13,40,41,44,45				0		1	_			0	_		1	1
8,9,24,25,40,41,56,57			_			1		0		0	_		1	1
8,10,12,14,40,42,44,46				0		1	_		_			0	1	1
32,33,34,35,36,37,38,39		1		0		0			_		_		1	1
32,33,34,35,40,41,42,43		1		0	_			0	_		_		1	1
32,33,36,37,40,41,44,45	<u> </u>	1		0	_		_			0	_		1	1
32,34,36,38,40,42,44,46		1		0	_		_		_			0	1	1
3,7,11,15,35,39,43,47				0	_					1		1	1	2
5,7,13,15,37,39,45,47				0				1	_			1	1	2
6,7,14,15,38,39,46,47				0	_			1		1	_	_	1	2
9,11,13,15,25,27,29,31		0	_			1	_		_			1	1	2
9,11,13,15,41,43,45,47				0		1			_			1	1	2
9,11,25,27,41,43,57,59			_			1		0	_			1	1	2
9,13,25,29,41,45,57,61			_			1	_			0		1	1	2
10,11,14,15,42,43,46,47				0		1	_			1	_		1	2
12,13,14,15,44,45,46,47				0		1		1	_		_		1	2
33,35,37,39,41,43,45,47	<u> </u>	1		0			_		_			1	1	2
34,35,38,39,42,43,46,47	<u> </u>	1		0			_			1	_		1	2
36,37,38,39,44,45,46,47	<del>                                     </del>	1		0				1	_		_		1	2
40,41,42,43,44,45,46,47		1		0		1	_				_		1	2
11,15,27,31,43,47,59,63						1	_			1		1	1	3
13,15,29,31,45,47,61,63	L		l			1		1	_			1	1	3

14,15,30,31,46,47,62,63	_	_	1	1	1	_	1	3
25,27,29,31,57,59,61,63	ı	1	1	_	_	1	1	3
41,43,45,47,57,59,61,63	1		1			1	1	3

### A2K İÇİN 4. SEVİYE

No	Х3	X2	X1	Α	В	С	A2K	Gruplar
0,1,2,3,4,5,6,7,8,9,10,11,12,13,14,15	0	0	ı	-	-	1	1	0
0,1,2,3,4,5,6,7,32,33,34,35,36,37,38,39		0	0			ı	1	0
0,1,2,3,8,9,10,11,32,33,34,35,40,41,42,43	_	0	_	0	_	-	1	0
0,1,4,5,8,9,12,13,32,33,36,37,40,41,44,45		0			0	ı	1	0
0,2,4,6,8,10,12,14,32,34,36,38,40,42,44,46	_	0	_	_	_	0	1	0
1,3,5,7,9,11,13,15,33,35,37,39,41,43,45,47	_	0	_	_	_	1	1	1
2,3,6,7,10,11,14,15,34,35,38,39,42,43,46,47	_	0	_	_	1	_	1	1
4,5,6,7,12,13,14,15,36,37,38,39,44,45,46,47	_	0	_	1	_	_	1	1
8,9,10,11,12,13,14,15,40,41,42,43,44,45,46,47	_	0	1	_	_	_	1	1
32,33,34,35,36,37,38,39,40,41,42,43,44,45,46,47	1	0		_	_		1	1
9,11,13,15,25,27,29,31,41,43,45,47,57,59,61,63	_	_	1	_	_	1	1	2

## A2K İÇİN 5. SEVİYE

No	Х3	X2	X1	Α	В	С	A2K	Gruplar
0,1,2,3,4,5,6,7,8,9,10,11,12,13,14,15,32,33,								
34,35,36,37,38,39,40,41,42,43,44,45,46,47	_	0	_	-		_	1	0

#### A2K İÇİN FORMÜL

No	Х3	X2	X1	Α	В	С
51	1	1	0	0	1	1
0,1,2,3,4,5,6,7,8,9,10,11,12,13,14,15,32,33,34,35,36,37,38,39,40,41,42,43,44,45,46,47		0	_	_	_	
25,27,29,31,57,59,61,63	1	1	1	-	-	1
24,56		1	1	0	0	0
30,62	1	1	1	1	1	0
53	1	1	0	1	0	1

X3X2!X1!ABC + !X2 + X2X1C + X2X1!A!B!C + X2X1AB!C + X3X2!X1A!BC

## A2S İÇİN 1. SEVİYE

No	Х3	X2	X1	Α	В	С	A2S	Gruplar
26,58	1	1	1	0	1	0	1	0
50,58	1	1	_	0	1	0	1	0

#### A2S İÇİN FORMÜL

No	Х3	X2	X1	Α	В	O
26	0	1	1	0	1	0
50,58	1	1	_	0	1	0

!X3X2X1!AB!C + X3X2!AB!C

## A2Y İÇİN 1. SEVİYE

No	Х3	X2	X1	А	В	С	A2Y	Gruplar
16,17	0	1	0	0	0	ı	1	0
16,18	0	1	0	0	_	0	1	0
16,20	0	1	0	ı	0	0	1	0
16,48	_	1	0	0	0	0	1	0
17,19	0	1	0	0	_	1	1	1
17,21	0	1	0	_	0	1	1	1
17,49	_	1	0	0	0	1	1	1
18,19	0	1	0	0	1	_	1	1
18,22	0	1	0	_	1	0	1	1
20,21	0	1	0	1	0	_	1	1
20,22	0	1	0	1	_	0	1	1
20,28	0	1	_	1	0	0	1	1
20,52	_	1	0	1	0	0	1	1
48,49	1	1	0	0	0	_	1	1
48,52	1	1	0	_	0	0	1	1
19,23	0	1	0	-	1	1	1	2
21,23	0	1	0	1	_	1	1	2
22,23	0	1	0	1	1	_	1	2
22,54	_	1	0	1	1	0	1	2
28,60	_	1	1	1	0	0	1	2
52,54	1	1	0	1	_	0	1	2
52,60	1	1	_	1	0	0	1	2
23,55	_	1	0	1	1	1	1	3
54,55	1	1	0	1	1	_	1	3

## A2Y İÇİN 2. SEVİYE

No	Х3	X2	X1	Α	В	С	A2Y	Gruplar
16,17,18,19	0	1	0	0	ı	ı	1	0
16,17,20,21	0	1	0	ı	0	ı	1	0
16,17,48,49	_	1	0	0	0	ı	1	0
16,18,20,22	0	1	0	ı	ı	0	1	0
16,20,48,52	_	1	0	_	0	0	1	0
17,19,21,23	0	1	0	ı	ı	1	1	1
18,19,22,23	0	1	0	ı	1	ı	1	1
20,21,22,23	0	1	0	1	ı	ı	1	1
20,22,52,54	_	1	0	1	ı	0	1	1
20,28,52,60	_	1	_	1	0	0	1	1
22,23,54,55	_	1	0	1	1	_	1	2

# A2Y İÇİN 3. SEVİYE

No	Х3	X2	X1	Α	В	C	A2Y	Gruplar
16,17,18,19,20,21,22,23	0	1	0	-	-	1	1	0

## A2Y İÇİN FORMÜL

No	Х3	X2	X1	Α	В	С
20,28,52,60	_	1	_	1	0	0
16,17,18,19,20,21,22,23	0	1	0		1	
48,49	1	1	0	0	0	
54,55	1	1	0	1	1	

X2A!B!C + !X3X2!X1 + X3X2!X1!A!B + X3X2!X1AB

No	Х3	X2	X1	Α	В	С	A3K	Gruplar
0,1	0	0	0	0	0		1	0
0,2	0	0	0	0		0	1	0
0,4	0	0	0		0	0	1	0
0,8	0	0		0	0	0	1	0
0,16	0		0	0	0	0	1	0
1,3	0	0	0	0		1	1	1
1,5	0	0	0		0	1	1	1
1,9	0	0	-	0	0	1	1	1
1,17	0	0	0	0	0	1	1	1
2,3	0	0	0	0	1		1	1
2,6	0	0	0	0	1	0	1	1
			U	0	1		1	1
2,10	0	0				0		
2,18	0	_	0	0	1	0	1	1
4,5	0	0	0	1	0	_	1	1
4,6	0	0	0	1		0	1	1
4,12	0	0		1	0	0	1	1
4,20	0		0	1	0	0	1	1
8,9	0	0	1	0	0	_	1	1
8,10	0	0	1	0	_	0	1	1
8,12	0	0	1	_	0	0	1	1
8,24	0	_	1	0	0	0	1	1
8,40	_	0	1	0	0	0	1	1
16,17	0	1	0	0	0	_	1	1
16,18	0	1	0	0	_	0	1	1
16,20	0	1	0	_	0	0	1	1
16,24	0	1	_	0	0	0	1	1
16,48	_	1	0	0	0	0	1	1
3,7	0	0	0	_	1	1	1	2
3,11	0	0	_	0	1	1	1	2
3,19	0	_	0	0	1	1	1	2
5,7	0	0	0	1	_	1	1	2
5,13	0	0	_	1	0	1	1	2
5,21	0	_	0	1	0	1	1	2
6,7	0	0	0	1	1	_	1	2
6,14	0	0	_	1	1	0	1	2
6,22	0	_	0	1	1	0	1	2
9,11	0	0	1	0		1	1	2
9,13	0	0	1	_	0	1	1	2
9,25	0		1	0	0	1	1	2
9,41		0	1	0	0	1	1	2
10,11	0	0	1	0	1		1	2
10,14	0	0	1		1	0	1	2
10,26	0	_	1	0	1	0	1	2
10,42	_	0	1	0	1	0	1	2
12,13	0	0	1	1	0	_	1	2
	0	0	1	1		0	1	2

12,28	0		1	1	0	0	1	2
17,19	0	1	0	0		1	1	2
17,21	0	1	0		0	1	1	2
17,25	0	1		0	0	1	1	2
17,49		1	0	0	0	1	1	2
18,19	- 0	1	0	0	1	_	1	2
18,22	0	1	0		1	- 0	1	2
18,26	0	1		0	1	0	1	2
18,50		1	0	0	1	0	1	2
20,21	- 0	1	0	1	0		1	2
20,22	0	1	0	1		0	1	2
20,28	0	1		1	0	0	1	2
20,52		1	0	1	0	0	1	2
24,25	- 0	1	1	0	0		1	2
24,26	0	1	1	0		0	1	2
24,28	0	1	1		0	0	1	2
24,56		1	1	0	0	0	1	2
40,41	1	0	1	0	0	_	1	2
40,42	1	0	1	0	_	0	1	2
40,56	1		1	0	0	0	1	2
48,49	1	1	0	0	0	_	1	2
48,50	1	1	0	0	_	0	1	2
48,52	1	1	0	_	0	0	1	2
48,56	1	1	-	0	0	0	1	2
7,15	0	0	ı	1	1	1	1	3
7,23	0	ı	0	1	1	1	1	3
11,15	0	0	1	_	1	1	1	3
11,27	0	_	1	0	1	1	1	3
13,15	0	0	1	1	_	1	1	3
13,29	0	_	1	1	0	1	1	3
13,45	_	0	1	1	0	1	1	3
14,15	0	0	1	1	1	_	1	3
14,30	0	_	1	1	1	0	1	3
14,46	_	0	1	1	1	0	1	3
19,23	0	1	0	_	1	1	1	3
19,27	0	1	_	0	1	1	1	3
21,23	0	1	0	1	_	1	1	3
21,29	0	1	_	1	0	1	1	3
22,23	0	1	0	1	1	_	1	3
22,30	0	1	_	1	1	0	1	3
22,54	_	1	0	1	1	0	1	3
25,27	0	1	1	0	_	1	1	3
25,29	0	1	1	_	0	1	1	3
25,57	_	1	1	0	0	1	1	3
26,27	0	1	1	0	1	_	1	3
26,30	0	1	1		1	0	1	3
26,58	_	1	1	0	1	0	1	3
28,29	0	1	1	1	0	_	1	3
28,30	0	1	1	1		0	1	3

28,60	_	1	1	1	0	0	1	3
41,45	1	0	1	_	0	1	1	3
41,57	1	_	1	0	0	1	1	3
42,46	1	0	1	_	1	0	1	3
42,58	1	_	1	0	1	0	1	3
49,57	1	1		0	0	1	1	3
50,54	1	1	0		1	0	1	3
50,58	1	1	_	0	1	0	1	3
52,54	1	1	0	1	_	0	1	3
52,60	1	1	_	1	0	0	1	3
56,57	1	1	1	0	0	_	1	3
56,58	1	1	1	0	_	0	1	3
56,60	1	1	1	_	0	0	1	3
15,31	0	_	1	1	1	1	1	4
15,47	_	0	1	1	1	1	1	4
23,31	0	1	_	1	1	1	1	4
23,55	_	1	0	1	1	1	1	4
27,31	0	1	1	_	1	1	1	4
29,31	0	1	1	1	_	1	1	4
30,31	0	1	1	1	1	_	1	4
30,62	_	1	1	1	1	0	1	4
45,47	1	0	1	1	_	1	1	4
46,47	1	0	1	1	1	_	1	4
46,62	1	_	1	1	1	0	1	4
54,55	1	1	0	1	1	_	1	4
54,62	1	1	_	1	1	0	1	4
58,62	1	1	1	_	1	0	1	4
60,62	1	1	1	1	_	0	1	4
31,63	_	1	1	1	1	1	1	5
47,63	1	_	1	1	1	1	1	5
55,63	1	1	_	1	1	1	1	5
62,63	1	1	1	1	1	_	1	5

No	Х3	X2		X1	Д	١	В		С		АЗК	Gruplar
0,1,2,3	0		0	0		0	_		1		1	0
0,1,4,5	0		0	0		_		0	_		1	0
0,1,8,9	0		0	_		0		0	-		1	0
0,1,16,17	0	_		0		0		0	_		1	0
0,2,4,6	0		0	0		_	_			0	1	0
0,2,8,10	0		0	_		0	_			0	1	0
0,2,16,18	0	-		0		0	_			0	1	0
0,4,8,12	0		0	_		-		0		0	1	0
0,4,16,20	0	ı		0		-		0		0	1	0
0,8,16,24	0	ı		_		0		0		0	1	0
1,3,5,7	0		0	0		-	_			1	1	1
1,3,9,11	0		0	_		0	_			1	1	1
1,3,17,19	0	_		0		0	_			1	1	1
1,5,9,13	0		0	_	_	_		0		1	1	1
1,5,17,21	0	_	-	0				0		1	1	1
1,9,17,25	0	_		_		0		0		1	1	1
2,3,6,7	0		0	0				1	_		1	1
2,3,10,11	0		0	_		0		1	_		1	1
2,3,18,19	0	_		0		0		1	_		1	1
2,6,10,14	0		0	_	_			1		0	1	1
2,6,18,22	0	_		0	_			1		0	1	1
2,10,18,26	0	_		_		0		1		0	1	1
4,5,6,7	0		0	0		1	_		_		1	1
4,5,12,13	0		0	_		1		0	_		1	1
4,5,20,21	0	_		0		1		0	_		1	1
4,6,12,14	0		0	_		1	_			0	1	1
4,6,20,22	0	_		0		1				0	1	1
4,12,20,28	0	_		_		1		0		0	1	1
8,9,10,11	0		0	1		0	_		_		1	1
8,9,12,13	0		0	1		-		0	_		1	1
8,9,24,25	0	_		1		0		0	_		1	1
8,9,40,41	_		0	1		0		0	_		1	1
8,10,12,14	0		0	1	_	-	_			0	1	1
8,10,24,26	0	_		1		0	_			0	1	1
8,10,40,42	_		0	1		0	_			0	1	1
8,12,24,28	0			1	-			0		0	1	1
8,24,40,56	_			1		0		0		0	1	1
16,17,18,19	0		1	0		0	_		_		1	1
16,17,20,21	0		1	0	_	-		0	_		1	1
16,17,24,25	0		1	_		0		0	_		1	1
16,17,48,49	_		1	0		0		0	_		1	1
16,18,20,22	0		1	0	ļ_		_			0	1	1
16,18,24,26	0		1	_		0	_			0	1	1
16,18,48,50	_		1	0		0	_			0	1	1
16,20,24,28	0		1	_	ļ_	-		0		0	1	1
16,20,48,52	_		1	0	_			0		0	1	1

16,24,48,56		1		0	0	0	1	1
3,7,11,15	0	0	_		1	1	1	2
3,7,19,23	0		0	_	1	1	1	2
3,11,19,27	0	_		- 0	1	1	1	2
5,7,13,15	0	0	_	1		1	1	2
5,7,21,23	0		0	1	_	1	1	2
5,13,21,29	0	_		1	- 0	1	1	2
6,7,14,15	0	0		1	1	_	1	2
6,7,22,23	0	_	0	1	1	_	1	2
6,14,22,30	0	_	_	1	1	0	1	2
9,11,13,15	0	0	1	_	_	1	1	2
9,11,25,27	0	_	1	0	_	1	1	2
9,13,25,29	0	-	1	_	0	1	1	2
9,13,41,45	_	0	1	_	0	1	1	2
9,25,41,57	_	_	1	0	0	1	1	2
10,11,14,15	0	0	1	_	1		1	2
10,11,26,27	0	1	1	0	1	1	1	2
10,14,26,30	0	ı	1	-	1	0	1	2
10,14,42,46	_	0	1	-	1	0	1	2
10,26,42,58		ı	1	0	1	0	1	2
12,13,14,15	0	0	1	1	_	ı	1	2
12,13,28,29	0	ı	1	1	0	ı	1	2
12,14,28,30	0	ı	1	1	_	0	1	2
17,19,21,23	0	1	0	_	_	1	1	2
17,19,25,27	0	1	_	0	_	1	1	2
17,21,25,29	0	1	_	_	0	1	1	2
17,25,49,57	-	1	_	0	0	1	1	2
18,19,22,23	0	1	0	_	1	_	1	2
18,19,26,27	0	1	_	0	1	_	1	2
18,22,26,30	0	1	_	_	1	0	1	2
18,22,50,54	_	1	0	_	1	0	1	2
18,26,50,58	_	1	_	0	1	0	1	2
20,21,22,23	0	1	0	1	_	_	1	2
20,21,28,29	0	1	_	1	0	_	1	2
20,22,28,30	0	1	_	1	_	0	1	2
20,22,52,54	_	1	0	1	_	0	1	2
20,28,52,60	_	1	_	1	0	0	1	2
24,25,26,27	0	1	1	0	_	_	1	2
24,25,28,29	0	1	1	_	0	_	1	2
24,25,56,57		1	1	0	0		1	2
24,26,28,30	0	1	1	_	_	0	1	2
24,26,56,58	_	1	1	0	_	0	1	2
24,28,56,60	_	1	1	_	0	0	1	2
40,41,56,57	1	_	1	0	0	_	1	2
40,42,56,58	1	_	1	0	_	0	1	2
48,49,56,57	1	1	_	0	0		1	2
48,50,52,54	1	1	0	_	_	0	1	2
48,50,56,58	1	1	_	0	_	0	1	2
48,52,56,60	1	1	_	_	0	0	1	2

7,15,23,31	0	_	_	1	1	1	1	3
11,15,27,31	0	_	1	_	1	1	1	3
13,15,29,31	0	_	1	1	_	1	1	3
13,15,45,47	-	0	1	1	-	1	1	3
14,15,30,31	0	-	1	1	1	-	1	3
14,15,46,47	_	0	1	1	1	_	1	3
14,30,46,62	_	_	1	1	1	0	1	3
19,23,27,31	0	1	_	_	1	1	1	3
21,23,29,31	0	1	_	1	_	1	1	3
22,23,30,31	0	1	_	1	1	_	1	3
22,23,54,55	_	1	0	1	1	_	1	3
22,30,54,62	_	1	_	1	1	0	1	3
25,27,29,31	0	1	1	_	_	1	1	3
26,27,30,31	0	1	1	_	1	_	1	3
26,30,58,62	_	1	1	_	1	0	1	3
28,29,30,31	0	1	1	1	_	_	1	3
28,30,60,62	_	1	1	1	_	0	1	3
42,46,58,62	1	_	1	_	1	0	1	3
50,54,58,62	1	1	_	_	1	0	1	3
52,54,60,62	1	1	_	1	_	0	1	3
56,58,60,62	1	1	1	_	_	0	1	3
15,31,47,63	_	_	1	1	1	1	1	4
23,31,55,63	_	1	_	1	1	1	1	4
30,31,62,63	_	1	1	1	1	_	1	4
46,47,62,63	1	_	1	1	1	_	1	4
54,55,62,63	1	1	_	1	1	_	1	4

No	Х3		X2		X1		Α		В		С		АЗК	Gruplar
0,1,2,3,4,5,6,7		0		0		0	_		-		_		1	0
0,1,2,3,8,9,10,11		0		0				0	-		_		1	0
0,1,2,3,16,17,18,19		0				0		0	-		_		1	0
0,1,4,5,8,9,12,13		0		0	_					0	_		1	0
0,1,4,5,16,17,20,21		0				0				0			1	0
0,1,8,9,16,17,24,25		0			_			0		0			1	0
0,2,4,6,8,10,12,14		0		0			_					0	1	0
0,2,4,6,16,18,20,22		0				0						0	1	0
0,2,8,10,16,18,24,26		0			_			0				0	1	0
0,4,8,12,16,20,24,28		0								0		0	1	0
1,3,5,7,9,11,13,15		0	_	0								1	1	1
1,3,5,7,17,19,21,23		0				0						1	1	1
1,3,9,11,17,19,25,27		0						0				1	1	1
1,5,9,13,17,21,25,29		0								0		1	1	1
2,3,6,7,10,11,14,15		0		0						1	_		1	1
2,3,6,7,18,19,22,23		0				0				1			1	1
2,3,10,11,18,19,26,27		0					_	0		1			1	1
2,6,10,14,18,22,26,30		0								1	_	0	1	1
4,5,6,7,12,13,14,15		0		0	_		_	1					1	1
4,5,6,7,20,21,22,23		0			_	0		1	_		_		1	1
4,5,12,13,20,21,28,29		0	_					1	•	0	_		1	1
4,6,12,14,20,22,28,30		0	_		_			1			_	0	1	1
8,9,10,11,12,13,14,15		0	_	0	_	1			-				1	1
8,9,10,11,24,25,26,27		0				1	_	0	•		_		1	1
8,9,12,13,24,25,28,29		0	_			1			-	0	_		1	1
8,9,24,25,40,41,56,57			_			1	_	0		0	_		1	1
8,10,12,14,24,26,28,30		0	_			1					_	0	1	1
8,10,24,26,40,42,56,58			_			1	_	0	•			0	1	1
16,17,18,19,20,21,22,23	_	0	_	1		0			•				1	1
16,17,18,19,24,25,26,27		0		1			_	0	-		_		1	1
16,17,20,21,24,25,28,29		0		1	_				-	0	_		1	1
16,17,24,25,48,49,56,57				1	_		_	0		0	_		1	1
16,18,20,22,24,26,28,30	_	0		1	_						_	0	1	1
16,18,20,22,48,50,52,54				1	_	0	_		_			0	1	1
16,18,24,26,48,50,56,58	_			1			_	0	-			0	1	1
16,20,24,28,48,52,56,60	_			1	_				-	0		0	1	1
3,7,11,15,19,23,27,31	_	0			_		_			1		1	1	2
5,7,13,15,21,23,29,31		0	_		_		_	1				1	1	2
6,7,14,15,22,23,30,31		0	_		_			1	_	1			1	2
9,11,13,15,25,27,29,31		0	_		-	1				_	_	1	1	2
10,11,14,15,26,27,30,31		0	_			1			_	1		_	1	2
10,14,26,30,42,46,58,62			_			1				1	_	0	1	2
12,13,14,15,28,29,30,31	_	0				1	_	1		_		-	1	2
17,19,21,23,25,27,29,31		0	_	1					_		_	1	1	2
18,19,22,23,26,27,30,31		0		1	_				_	1		<u> </u>	1	2
18,22,26,30,50,54,58,62				1	-		_			1	_	0	1	2
10,22,20,30,30,34,36,02	l <b>–</b>			т_	L <b>–</b>		L <b>–</b>					U	1	

20,21,22,23,28,29,30,31		0	1	_	1	-	_	1	2
20,22,28,30,52,54,60,62	_		1	ı	1	ı	0	1	2
24,25,26,27,28,29,30,31		0	1	1	_	ı	-	1	2
24,26,28,30,56,58,60,62	_		1	1	_	ı	0	1	2
48,50,52,54,56,58,60,62		1	1	-	_	ı	0	1	2
14,15,30,31,46,47,62,63	_		ı	1	1	1	_	1	3
22,23,30,31,54,55,62,63	_		1	_	1	1	_	1	3

#### A3K İÇİN 4. SEVİYE

No	Х3	X2	X1	Α	В	С	АЗК	Gruplar
0,1,2,3,4,5,6,7,8,9,10,11,12,13,14,15	0	0		_	_	ı	1	0
0,1,2,3,4,5,6,7,16,17,18,19,20,21,22,23	0	_	0	_	_	_	1	0
0,1,2,3,8,9,10,11,16,17,18,19,24,25,26,27	0	_	_	0	_	-	1	0
0,1,4,5,8,9,12,13,16,17,20,21,24,25,28,29	0				0	ı	1	0
0,2,4,6,8,10,12,14,16,18,20,22,24,26,28,30	0	_	_	_	_	0	1	0
1,3,5,7,9,11,13,15,17,19,21,23,25,27,29,31	0	_	_	_	_	1	1	1
2,3,6,7,10,11,14,15,18,19,22,23,26,27,30,31	0	_	_	_	1	_	1	1
4,5,6,7,12,13,14,15,20,21,22,23,28,29,30,31	0	_	_	1	_	_	1	1
8,9,10,11,12,13,14,15,24,25,26,27,28,29,30,31	0	_	1	_	_	-	1	1
16,17,18,19,20,21,22,23,24,25,26,27,28,29,30,31	0	1		_	_		1	1
16,18,20,22,24,26,28,30,48,50,52,54,56,58,60,62	_	1	_	_	_	0	1	1

# A3K İÇİN 5. SEVİYE

No	Х3	X2	X1	Α	В	С	АЗК	Gruplar
0,1,2,3,4,5,6,7,8,9,10,11,12,13,14,15,16,17								
,18,19,20,21,22,23,24,25,26,27,28,29,30,31	0		_	_		_	1	0

## A3K İÇİN FORMÜL

No	Х3	X2	X1	Α	В	С
40,41	1	0	1	0	0	
0,1,2,3,4,5,6,7,8,9,10,11,12,13,14,15,16,17,18,19,20,21,22,23,24,25,26,27,28,29,30,31	0	1	_	ı	ı	
48,50,52,54,56,58,60,62	1	1		ı	ı	0
42,46	1	0	1	1	1	0
45,47	1	0	1	1	-	1
49,57	1	1		0	0	1
55,63	1	1	_	1	1	1

X3!X2X1!A!B + !X3 + X3X2!C + X3!X2X1B!C + X3!X2X1AC + X3X2!A!BC + X3X2ABC

## A3S İÇİN 1. SEVİYE

No	Х3	X2	X1	Α	В	С	A3S	Gruplar
43,59	1	1	1	0	1	1	1	0
51,59	1	1	_	0	1	1	1	0

## A3S İÇİN FORMÜL

No	Х3	X2	X1	Α	В	O
43	1	0	1	0	1	1
51,59	1	1		0	1	1

X3!X2X1!ABC + X3X2!ABC

A3Y İÇİN 1. SEVİYE

No	Х3	X2	X1	А	В	С	A3Y	Gruplar
32,33	1	0	0	0	0	ı	1	0
32,34	1	0	0	0	-	0	1	0
32,36	1	0	0	1	0	0	1	0
33,35	1	0	0	0	_	1	1	1
33,37	1	0	0	-	0	1	1	1
34,35	1	0	0	0	1	_	1	1
34,38	1	0	0	ı	1	0	1	1
36,37	1	0	0	1	0	_	1	1
36,38	1	0	0	1	_	0	1	1
36,44	1	0	ı	1	0	0	1	1
35,39	1	0	0	1	1	1	1	2
37,39	1	0	0	1	-	1	1	2
37,53	1	_	0	1	0	1	1	2
38,39	1	0	0	1	1	_	1	2
53,61	1	1		1	0	1	1	3

## A3Y İÇİN 2. SEVİYE

No	Х3	X2	X1	Α	В	С	A3Y	Gruplar
32,33,34,35	1	0	0	0	ı	_	1	0
32,33,36,37	1	0	0	ı	0	_	1	0
32,34,36,38	1	0	0	ı	1	0	1	0
33,35,37,39	1	0	0	ı	ı	1	1	1
34,35,38,39	1	0	0	ı	1	_	1	1
36,37,38,39	1	0	0	1	_	_	1	1

#### A3Y İÇİN 3. SEVİYE

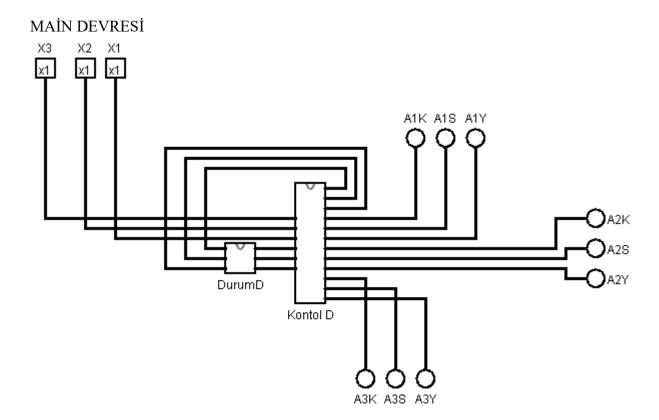
No	Х3	X2	X1	Α	В	С	A3Y	Gruplar
32,33,34,35,36,37,38,39	1	0	0	-	-	-	1	0

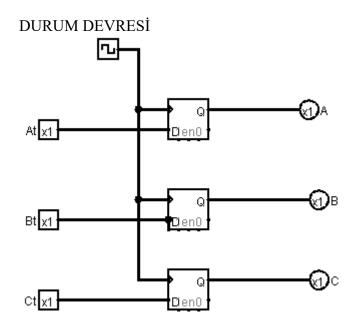
## A3Y İÇİN FORMÜL.

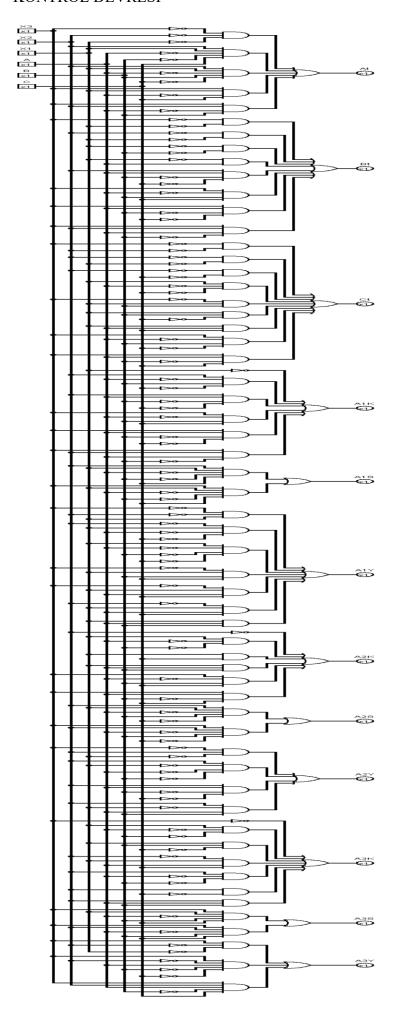
No	Х3	X2	X1	Α	В	С
44	1	0	1	1	0	0
32,33,34,35,36,37,38,39	1	0	0	-	_	_
53,61	1	1		1	0	1

X3!X2X1A!B!C + X3!X2!X1 + X3X2A!BC

## 5. Devre Çizimi







#### 6. Logisim simülasyon tasarımı

X3,X2 ve X1'in durumlarına göre ışıklar Yeşil, Sarı ve Kırmızı sırası ile yanmaktadır. D filip flip kullanılmıştır. Flip flopları durum devresine ekledik. Kontrol devresi, X3,X2,X1 ve Durum deveresinden gelen sinyalleri ışıklara iletmektedir.

