OSNOVE DIGITALNIH VEZIJ

3. Domača naloga
11/7/2020

Mojca Kompara

Podana je naslednja preklopna funkcija:

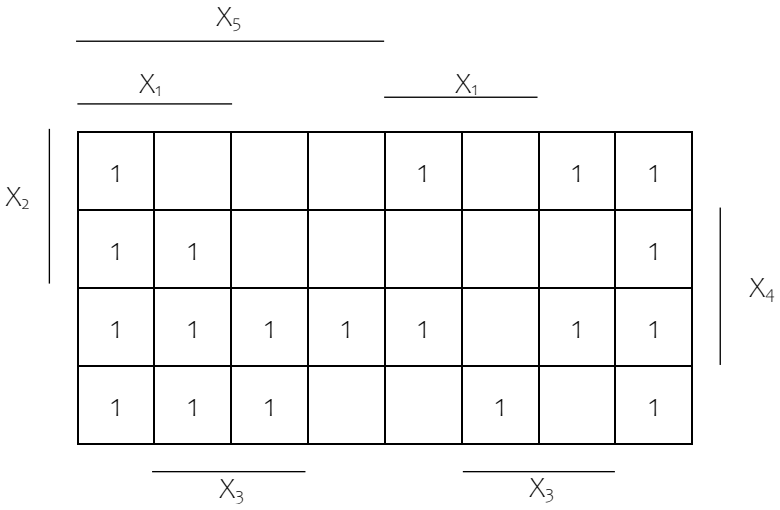
$$f(x_1, x_2, x_3, x_4) = \&^5(30, 27, 22, 20, 18, 17, 16, 15, 9, 5, 3, 2, 1)$$

Zapišite funkcijo v matrični obliki, t.j. z Veitchevim diagramom. Funkcija je podana v popolni konjuktivni normalni obliki, zato jo morate najprej pretvoriti v pravilno obliko.

x_1	x_2	x_3	x_4	x_5	$f(x_1, x_2, x_3, x_4)$	M_i	m_i
0	0	0	0	0	1	31	0
0	0	0	0	1	0	30	1
0	0	0	1	0	1	29	2
0	0	0	1	1	1	28	3
0	0	1	0	0	0	27	4
0	0	1	0	1	1	26	5
0	0	1	1	0	1	25	6
0	0	1	1	1	1	24	7
0	1	0	0	0	1	23	8
0	1	0	0	1	0	22	9
0	1	0	1	0	1	21	10
0	1	0	1	1	0	20	11
0	1	1	0	0	1	19	12
0	1	1	0	1	0	18	13
0	1	1	1	0	0	17	14
0	1	1	1	1	0	16	15
1	0	0	0	0	0	15	16
1	0	0	0	1	1	14	17
1	0	0	1	0	1	13	18
1	0	0	1	1	1	12	19
1	0	1	0	0	1	11	20
1	0	1	0	1	1	10	21
1	0	1	1	0	0	9	22
1	0	1	1	1	1	8	23
1	1	0	0	0	1	7	24
1	1	0	0	1	1	6	25
1	1	0	1	0	0	5	26
1	1	0	1	1	1	4	27

1	1	1	0	0	0	3	28
1	1	1	0	1	0	2	29
1	1	1	1	0	0	1	30
1	1	1	1	1	1	0	31

$f(x_1, x_2, x_3, x_4) = \vee^5 (0, 2, 3, 5, 6, 7, 8, 10, 12, 17, 18, 19, 20, 21, 23, 24, 25, 27, 31)$



1				1		1	1
1	1						1
1	1	1	1	1		1	1
1	1	1			1		1