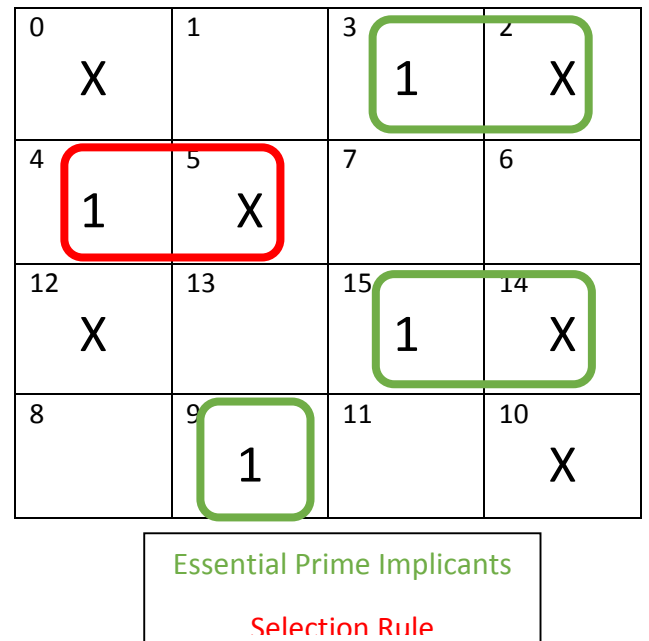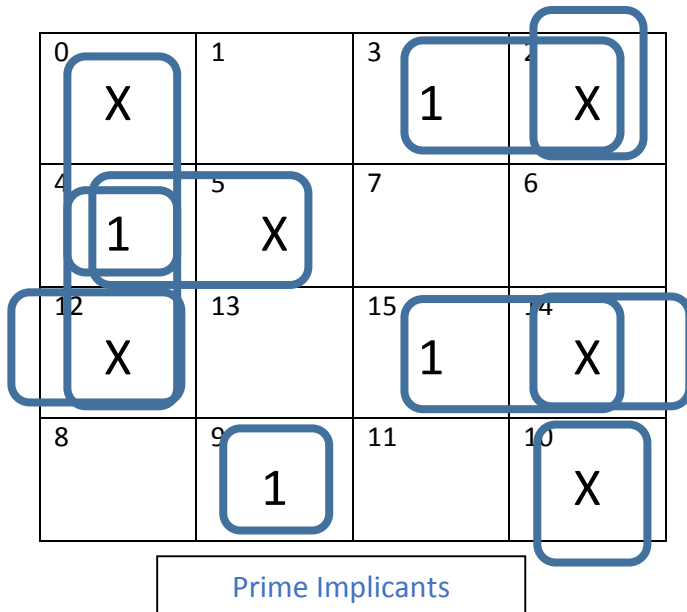Module1

Do Boolean optimization on the following function by showing prime implicants, essential prime implicants, and doing selection rule!

$F(W,X,Y,Z)= \Sigma m\ (3,4,9,15), d(W,X,Y,Z)= \Sigma m\ (0,2,5,10,12,14)$

0	1	3	2
X		1	X
4	**5**	**7**	**6**
1	X		
12	**13**	**15**	**14**
X		1	X
8	**9**	**11**	**10**
	1		X

Prime Implicants

0	1	3	2
X		1	X
4	**5**	**7**	**6**
1	X		
12	**13**	**15**	**14**
X		1	X
8	**9**	**11**	**10**
	1		X

Essential Prime Implicants

Selection Rule

Dari K-Maps diatas didapatkan rumusan sebagai berikut :

(W'XY') + (WX'Y'Z) + (WXY) + (W'XY)