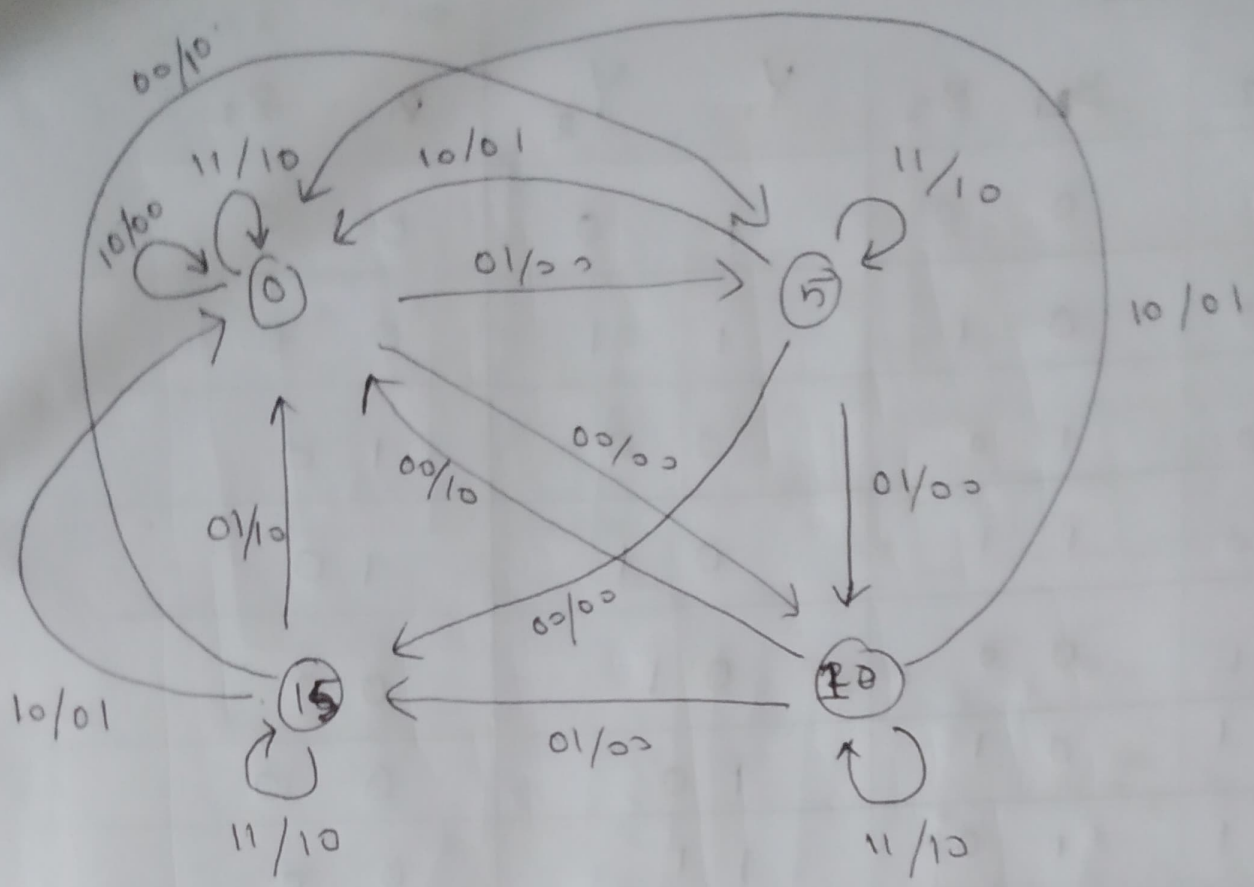


• ~~State~~ tables

State assignment : 0 → 0 0

5 → 0 1

10 → 1 0

15 → 1 1

State tables

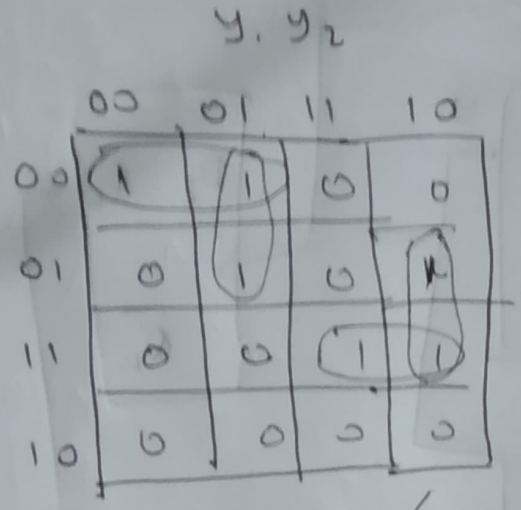
x_1	x_2	y_1	y_2	Y_1	Y_2	z_1	z_2
0	0	0	0	1	0	0	0
0	0	0	1	1	1	0	0
0	0	1	0	0	0	1	0
0	0	1	1	0	1	1	0
0	1	0	0	0	1	0	0
0	1	0	1	1	0	0	0
0	1	1	0	1	1	0	0
0	1	1	1	0	0	1	0
1	0	0	0	0	0	0	0
1	0	0	1	0	0	0	1
1	0	1	0	0	0	0	1
1	0	1	1	0	0	0	1
1	1	0	0	0	0	1	0
1	1	0	1	0	1	1	0
1	1	1	0	1	0	1	0
1	1	1	1	1	1	1	0

here, the excitation table for D FF is same as Y_1 and Y_2 $D_1 = Y_1$

$D_2 = Y_2$

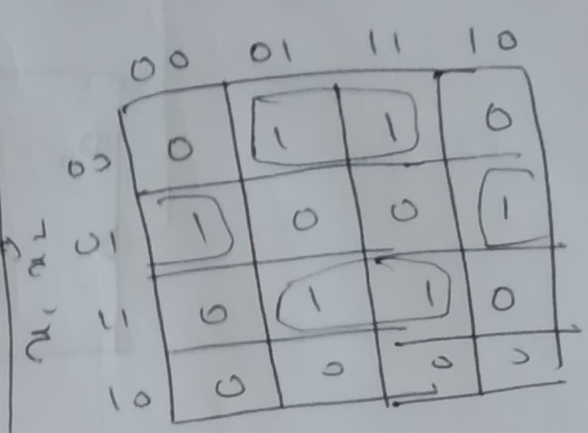
kmAPs

D_1



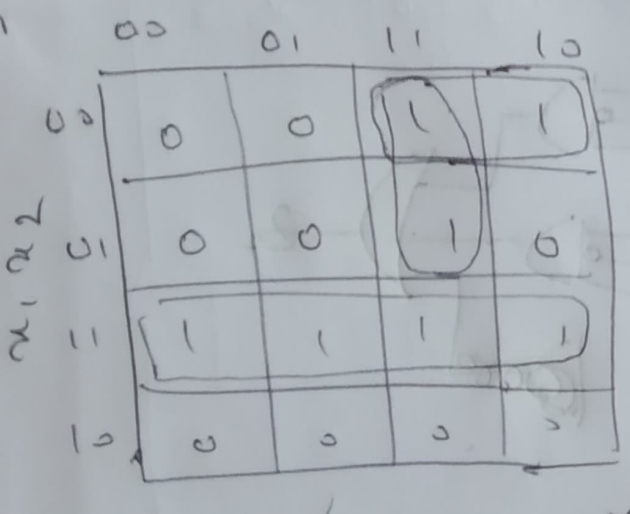
$D_1 = \bar{x}_1 x_2 \bar{y}_1 + \bar{x}_1 \bar{y}_1 y_2 + x_2 y_1 \bar{y}_2 + x_2 y_1 x_1$

D_2



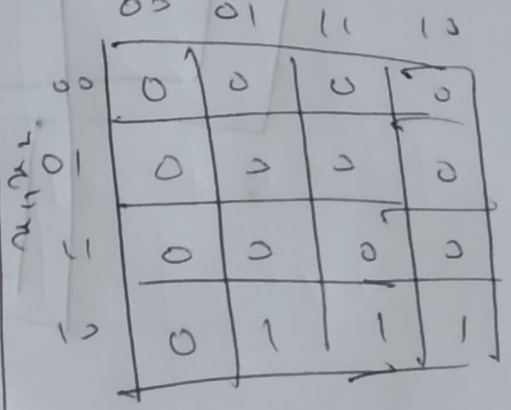
$D_2 = \bar{x}_1 \bar{x}_2 y_2 + \bar{x}_1 x_2 \bar{y}_2 + x_1 x_2 y_2$

Z_1

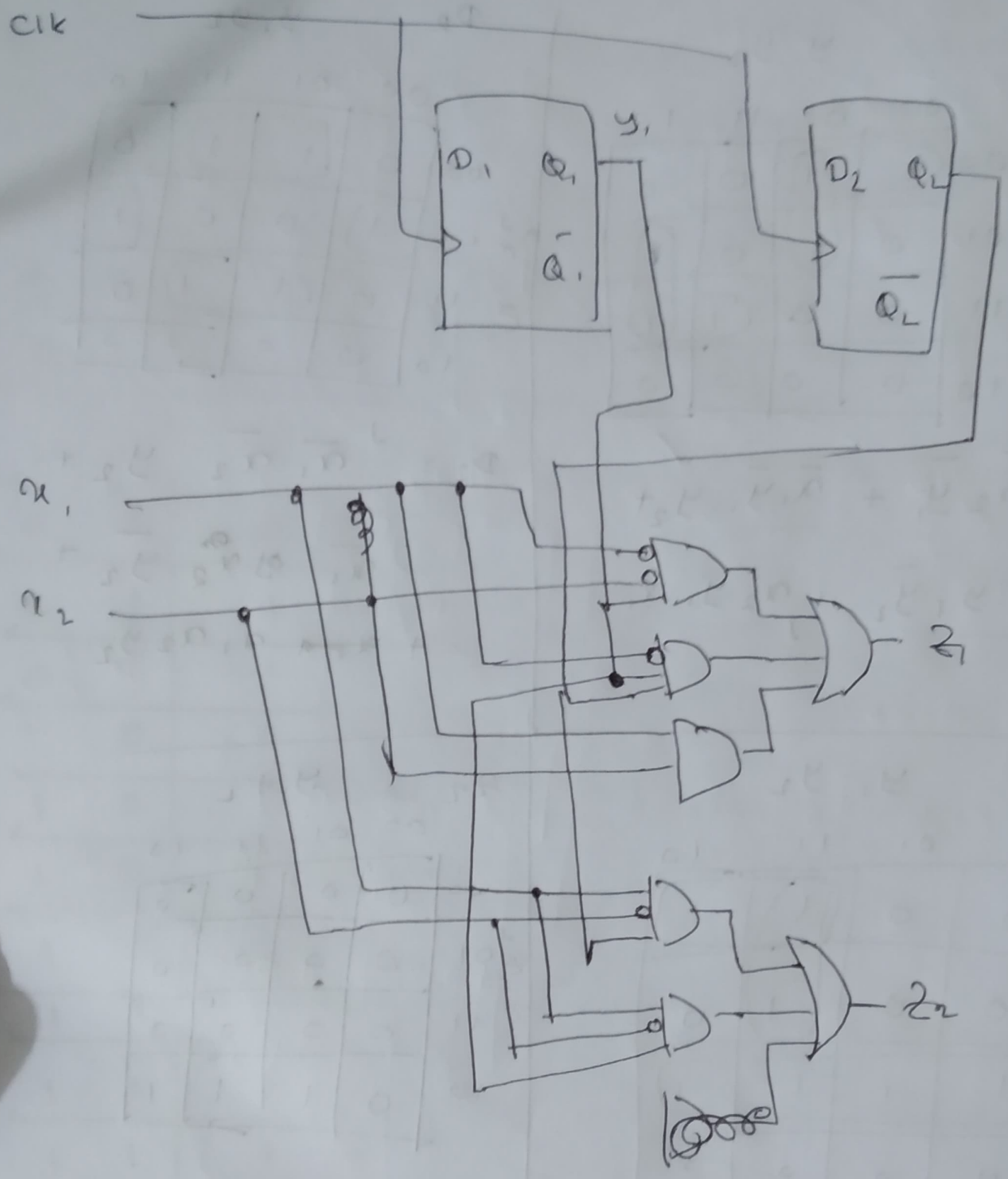


$Z_1 = \bar{x}_1 \bar{x}_2 y_1 + \bar{x}_1 y_1 y_2 + x_1 x_2$

Z_2



$Z_2 = x_1 \bar{x}_2 y_2 + x_1 \bar{x}_2 y_1$


Clk
D_1
Q_1
$\bar{Q}_1$
y_1
D_2
Q_2
$\bar{Q}_2$
x_1
x_2
z_1
z_2