

Kulvir Singh
19BCE2074

3

19BCE2074

Output

Expression

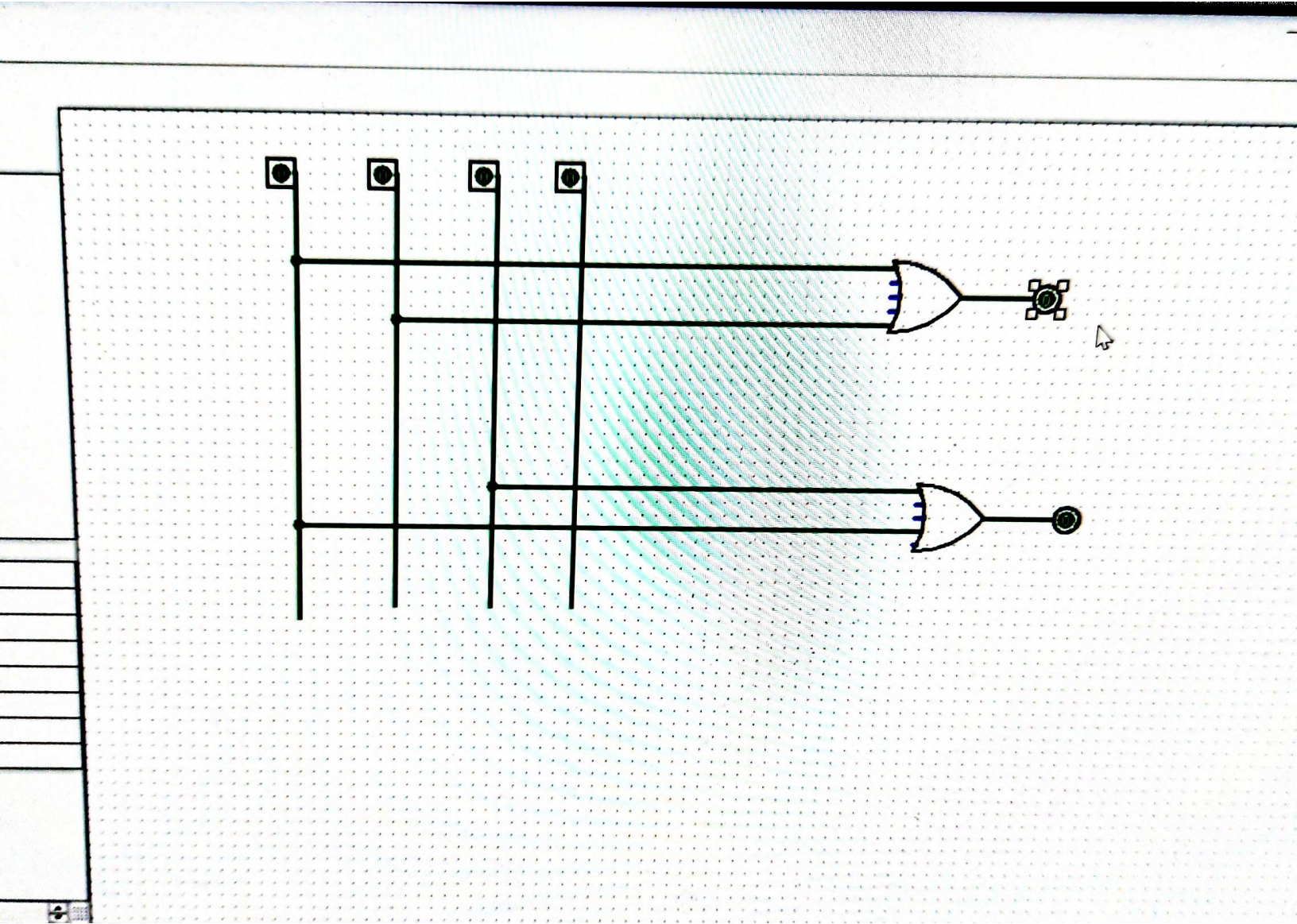
(i) $D_1 :- \bar{a}\bar{b}$

(ii) $D_2 :- \bar{a}b$

(iii) $D_3 :- a\bar{b}$

(iv) $D_4 :- ab.$

2 to 4 Decoder.



a	b	c	d	x	y
0	0	0	0	0	0
0	0	0	1	0	0
0	0	1	0	0	1
0	0	1	1	0	1
0	1	0	0	1	0
0	1	0	1	1	0
0	1	1	0	1	1
0	1	1	1	1	1
1	0	0	0	1	1
1	0	0	1	1	1
1	0	1	0	1	1
1	0	1	1	1	1
1	1	0	0	1	1
1	1	0	1	1	1
1	1	1	0	1	1
1	1	1	1	1	1

Build Circuit

4 to 2 Encoder

Output, :-
Expression.

$$X :- E_1 + E_2$$

$$Y :- E_1 + E_3$$