

Soln(1) :-

00011110

↓ 1's Complement

11100001

+1

11100010 Ans

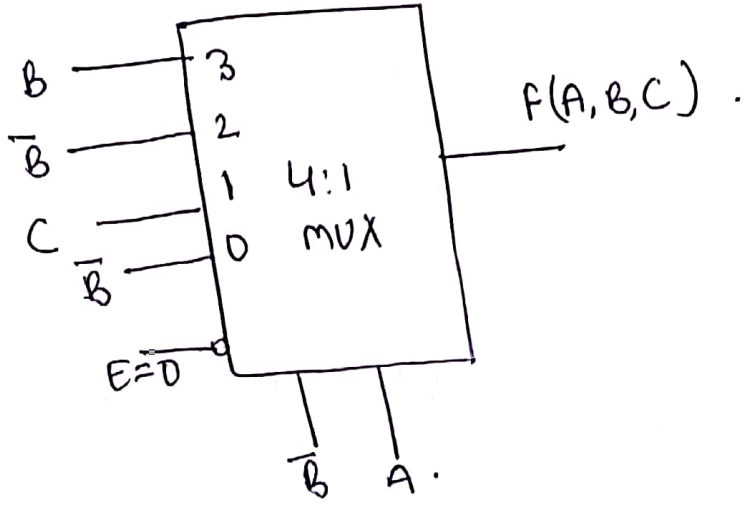
Soln2:

	CD	$\bar{C}\bar{D}$	$\bar{C}D$	CD	$C\bar{D}$
AB	0		1	3	2
$\bar{A}\bar{B}$			5	7	6
$\bar{A}B$	4	1	1	1	
AB		12	13	15	14
$A\bar{B}$		8	9	11	10

Ans = 4

Min Exp^o $\bar{A}\bar{B}\bar{C} + C\bar{D}\bar{A} + A\bar{C}D + ABC$

Soln 3:-



$$f(A, B, C) = \cancel{B\bar{A}\bar{B}} + BAC + \bar{B}\bar{A}\bar{B} + \cancel{\bar{B}AB}$$

$$\Rightarrow \boxed{ABC + \overline{A}\overline{B}}$$

Ans = 2

Qu: Ans = 9 nor gates

