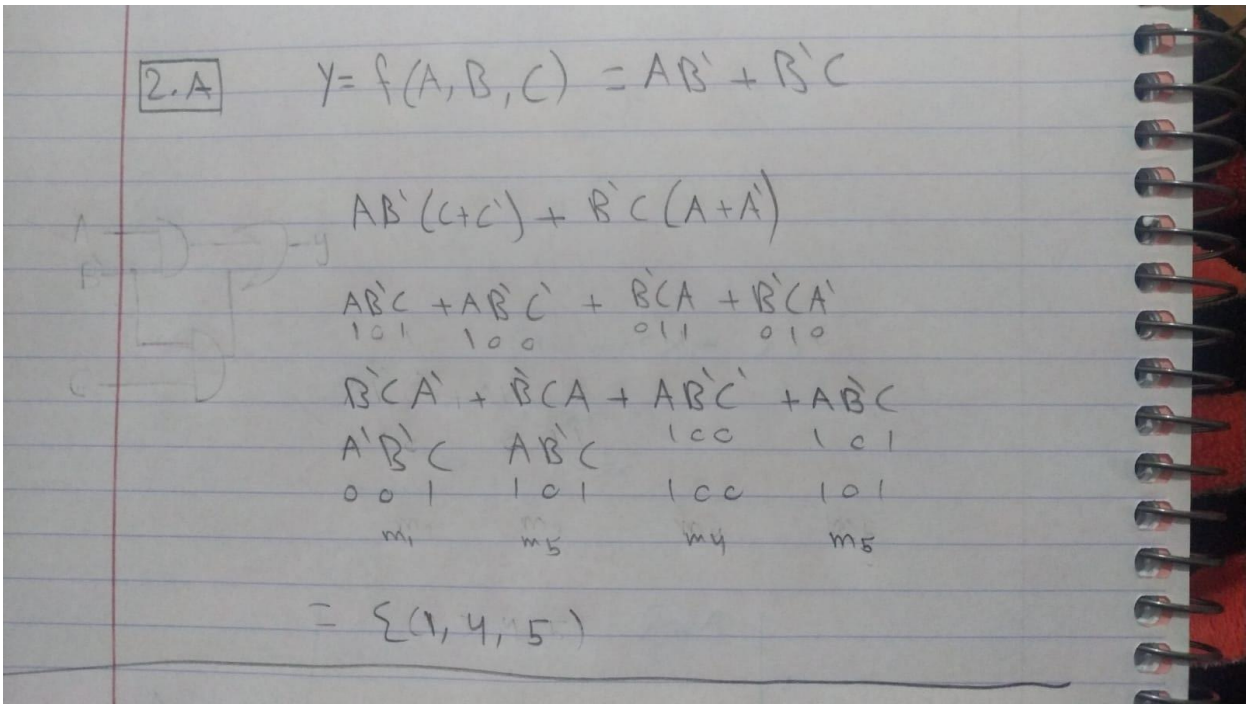
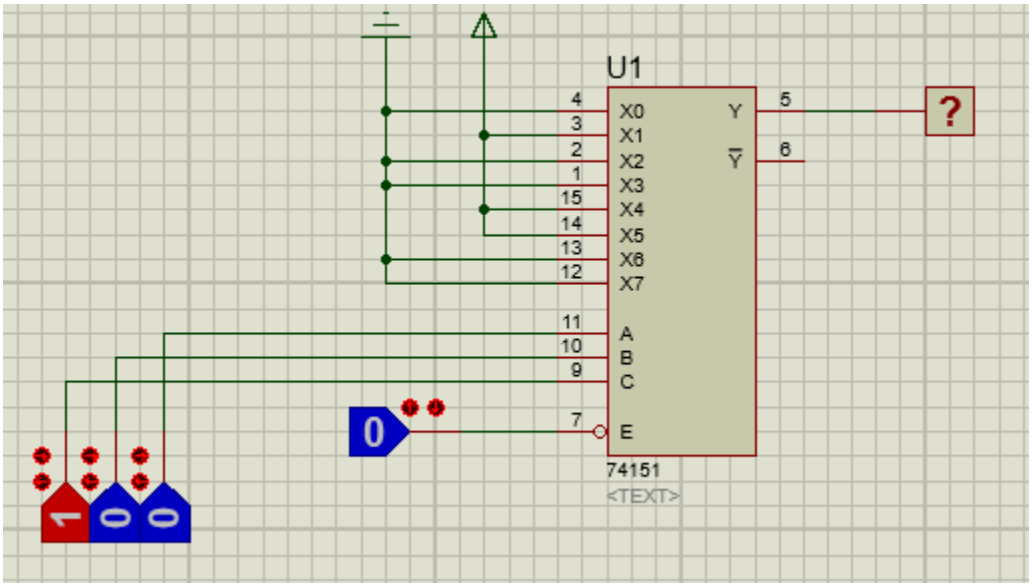
Islam Jihad 1191375

Q2 a-





b-

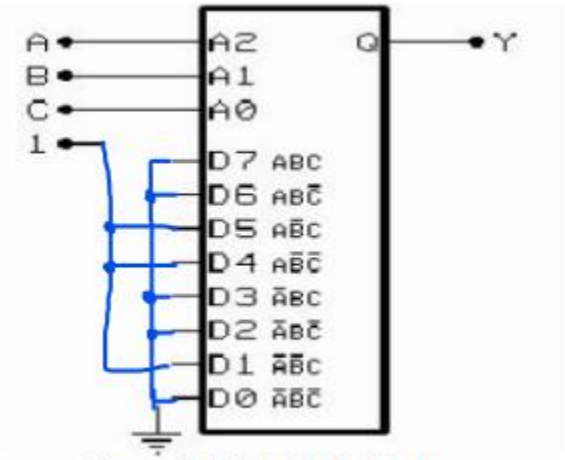


Figure 3.1:8-to-1Multiplexer

Q3 a-

Y = A'BC + BC'

Y = A'BC + (A+A')BC'

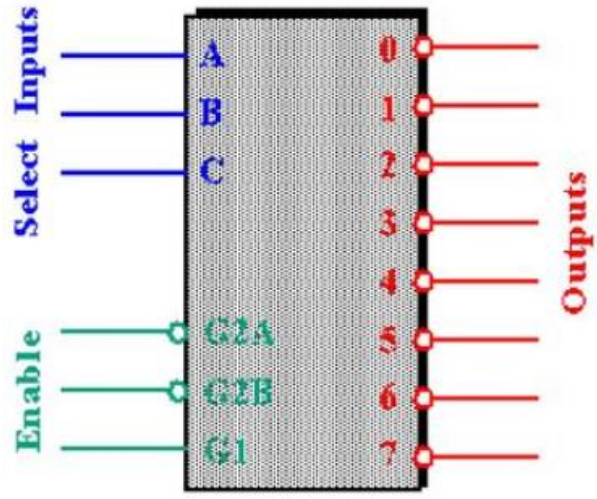
Y = A'BC + ABC' + A'BC'

Y = 011 + 110 + 010

Y = ∑(2,3,6)

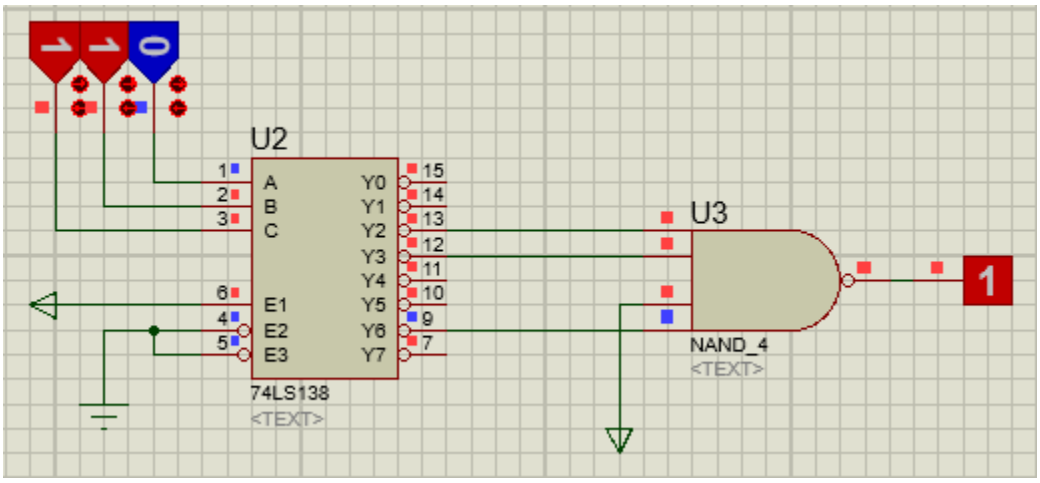
b-

thhis is the troth table of 3-8 multiblexer which shows how to connect the IC with inpusts and outputs



Inputs						Output							
Enable			Select										
G2A	G2B	G1	C	B	A	0	1	2	3	4	5	6	7
1	X	X	X	X	X	1	1	1	1	1	1	1	1
X	1	X	X	X	X	1	1	1	1	1	1	1	1
X	X	0	X	X	X	1	1	1	1	1	1	1	1
0	0	1	0	0	0	0	1	1	1	1	1	1	1
0	0	1	0	0	1	1	0	1	1	1	1	1	1
0	0	1	0	1	0	1	1	0	1	1	1	1	1
0	0	1	0	1	1	1	1	1	0	1	1	1	1
0	0	1	1	0	0	1	1	1	1	0	1	1	1
0	0	1	1	0	1	1	1	1	1	1	0	1	1
0	0	1	1	1	0	1	1	1	1	1	1	0	1
0	0	1	1	1	1	1	1	1	1	1	1	1	0

Here is the cercuit



First we use the E1 enable only, then every input give one output and from the equation if the output was 2, 3 or 6 the output will give 1 (but it work onactive low so it give a qustion mark sign) and this work by using NAND gate.