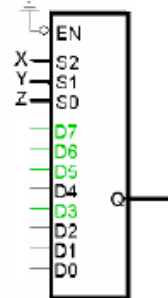


Labwork#8

Q#1.

Construct a one full adder using two 8-to-1 multiplexer as shown in Fig.1. First one to

implement the sum and the second to implement the carry



Q# 2.

Draw a circuit for the following function F using a 3-to-8 decoder (note this is Active-High) and one OR gate.

$$F(A,B,C) = \sum m(2,3,6,7).$$

Q#3

Draw a circuit for the following function G using only one (active-low) 2-to-4 decoder .

$$G(w,x,y,z) = \sum m(5,6,7,8,9,10,12,13,14,15) \text{ with Don't Care Conditions}$$

$$d(w,x,y,z) = \sum m(0,1,2,3,4).$$