

B) Write pseudo-code for the Multi-code Converter Controller in the Multi-Code Converter Module. Show what values are output from the Multi-code Converter Controller for the cases when button 0, button 1, and button 2 are pushed.

Module MultiConverter (Digi2, Digi1, Digi0...  
switch, btn);

input [3:0] switch;  
input [2:0] btn;

output [6:0] Digi2, Digi1, Digi0;

reg [6:0] Digi2, Digi1, Digi0;

always @ (switch or btn) begin;

if (btn == 2) begin; // 1st case

Digi2 = 7'b "

case (switch)

0: begin Digi1 = 7'b " , Digi0 = 7'b " ; end

1:

2:

3:

4:

endcase

end

else if (btn == 0) begin // other cases

0:

1:

2:

3:

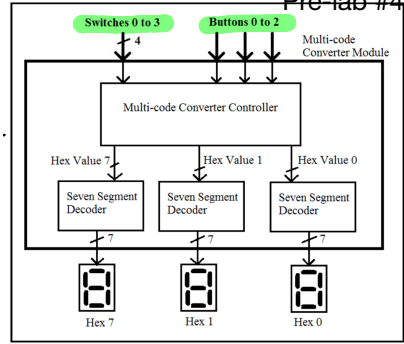


Figure 1: Multi-code Converter Module

