Part-C: Design and implement the operations mentioned and Table-1 using verilog hdl and generate the bitstream file and do the following:

1. Display the Output Y using LEDs
2. write verilog code to convert the binary output to BCD number
3. Display the same by interfacing Seven Segment Display.

Where the inputs A and B are 5-bit size and the selection line is 2 bit size and output Y is maximum of 10 bits. **Note that A and B are signed numbers**

Select	Operation
0	Y = A + B
1	Y = A - B
2	$Y = A \times B$
3	Y = max(A,B)

Table 1: Simple ALU Operations