EEE 212-2-Odd **31.10.2020**

LAB 1 (DUE ON 31.10.2020 11.59 AM)

Part A. [100 points]

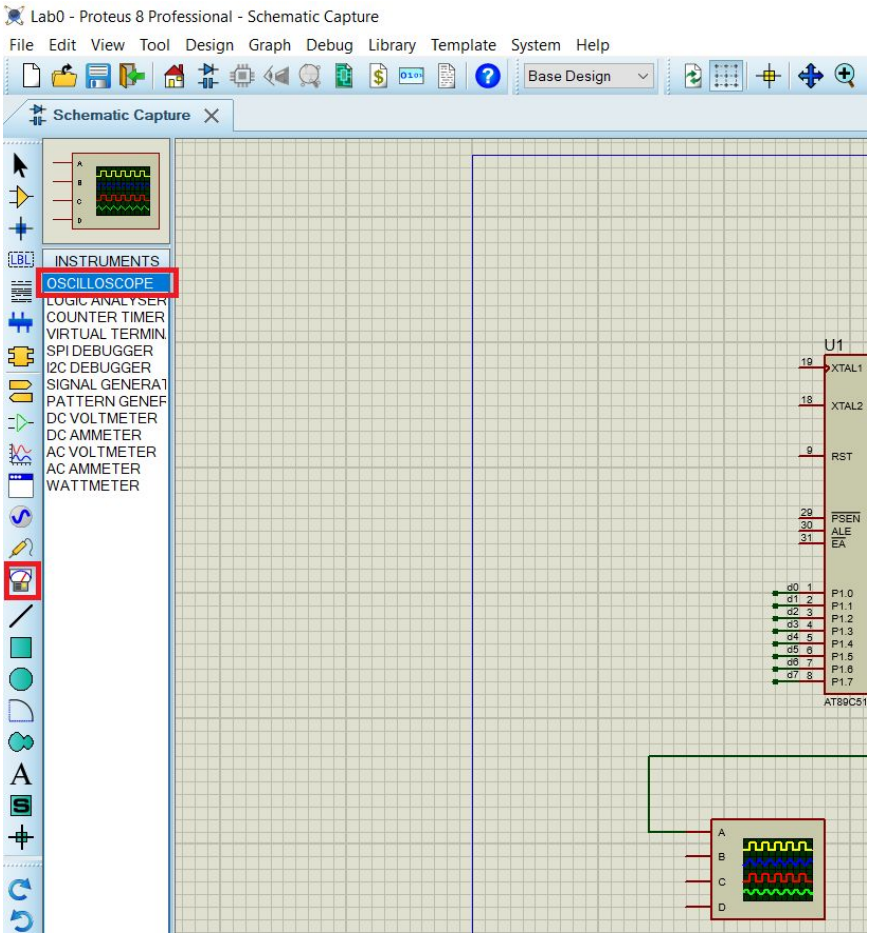
Using a crystal of 11.0592 MHz, produce a signal of frequency 50 Hz on P2.5 with a variable duty cycle between 10% and 90%. The duty cycle 10D (the percentage of time the signal is 1) will be determined at the beginning by an input D from the keypad such that 10D% will be duty cycle provided D is the typed key.

For example: You need to produce a square wave with a 70% duty cycle when you press 7.

-You can use the “keypad.asm” code that is given you for Proteus Tutorial (you need to remove the infinite loop in the beginning of the code and use the required subroutines in order to get an input from the keypad)

-In order to demonstrate and check your signal, you can use the virtual oscilloscope.

-(Make sure to click “Debug -> Reset Debug Popup Windows” each time you run your code if you are using the virtual oscilloscope.)



Important Notes:

-The deadline is STRICT. Students with no submitted code cannot get a check. Please make sure to submit your code.

- Do not make any changes to your code after submitting it. Changes after the deadline will not be considered.

-(For the students in zoom) If you have any questions, or you need a check, raise your hand. We will assign you to a breakout room.

-This is an individual assignment. Do not do it in groups. You need to submit your own code through Turnitin.