Lab 8

Please make sure that the Function Generator output a signal between 0-5V before connect it to the Microcontroller.

1- An External square wave (From the Function Generator) with an 100KHz Frequency used as an external Clock source to the microcontroller, write a C program to generate a 1000 Hz square wave on PORTB.5 with 50% Duty cycle using Counter 0. Then make it 70% Duty cycle.

2- A square wave (from the Function generator) is connected to an external interrupt and any time a L-to-H pulse comes in, a single PORTB.5 is turned on, and any time a H-to-L pulse comes in, the PORTB.5 is turn off. The rate of "On" and "Off" is the same as the square wave frequency. Show the input square wave and the output square wave on the Oscilloscope.