ASSIGNMENT 5

1. Write a program to transfer a string of characters continuously on UART interface with polling mechanism.
2. Write a program to transfer a string of characters continuously on UART interface with interrupt mechanism.
3. Write a program to do loopback operation on UART interface with polling technique. Take care of carriage return.
4. Write a program to do loopback operation on UART interface with interrupt technique. Take care of carriage return.
5. Write a program to print on serial console "Key Pressed" whenever user presses the key using interrupts.
6. Write program for above using Polling.
7. Create a program with the following using interrupts: (use PWM timer concepts for led brightness control)
   If 0 is received via UART, the Yellow LED is OFF.
   If 1 is received via UART, the Yellow LED glows at half brightness.
   If 2 is received via UART, the Yellow LED shines at full brightness.
   For any other input, print "ERROR" to the console.

Note: Make configurations in .ioc file such that the LEDs should be in OFF state by default

Guidelines for submission of Assignments for microcontroller related programming

- .ioc file, main.c file should be submitted with the file name as Q1.ioc, Q1main.c