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1 /*
2  * Experiment No. 9_B
3  * Program statement: Interface serial communication port (USART) of PIC18
4  * with PC and write an embedded C program for PIC18 to receive and
transmit
5  * the information serially form PC to microcontroller and microcontroller
6  * to PC for various baud rates and display the received information on
led
7  * or LCD.
8  * Roll no.- 312046      Batch no.- B2
9  * Date of performance- 12/09/2018
10 */
11
12 #include "LCD.h"
13
14 void main(){
15     TXSTA = 0b00100000;           //Enable the transmit bit
16     RCSTA = 0b10010000;           //Serial port enabled
17     SPBRG = 12;                   //X = ((8M/9600)/64)-1  X = 12.02 = SPBRG
18     TRISCbits.TRISC6 = 0;         //Tx pin as output
19     TRISCbits.TRISC7 = 1;         //Rx pin as input
20     while(1){
21         serialComm();
22     }
23 }
24
25 void serialComm(){
26     while(PIR1bits.RCIF == 0);    //Wait until all data is received
27     displayMsg(1,1,RCREG);        //Display received data on LCD
28     TXREG = RCREG;                //Transmit received data
29     while(PIR1bits.TXIF == 0);    //Wait until all data is transmitted
30 }
```