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/***********************************
ECET 17900 - Introduction to Digital Systems - Lab #3
Name: Alec Derwent
Date: January 31, 2020
Lab Day and Time: Friday @ 9:30
Included file: <stdio.h> and "serial.c"
IO Connections: none for this procedure
Description: This is a simple serial test program that includes the required
           files to utilize standard input and output function. The program
           will display and initial message then do nothing.
Key Takes: This is the approach required to display information throughout the
#include <avr/io.h>
#define F_CPU 16000000L
#include <util/delay.h>
#include <stdio.h>
#include "serial.c"
int main(void)
   init_UART();
                    // turn on and setup the serial port connection
   //printf("STDIO Test Program for Lab 3 - Alec Derwent \n\r");
   DDRC = 0xff;
   DDRK = 0x00;
   while(1)
       while(PINK == 0) {
          printf("Waiting for the Button to be pressed");
       PORTC = 0x18;
       _delay_ms(800);
       PORTC = 0x24;
       _delay_ms(400);
       PORTC = 0x42;
       _delay_ms(400);
       PORTC = 0x81;
       _delay_ms(2000);
   }
}
```