```c
/*****************************************************************
 *
 * Alternately toggle two LEDs when a push button is pressed.
 * ATmega328P (Arduino Uno), 16 MHz, AVR 8-bit Toolchain 3.6.2
 *
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 *
 *****************************************************************/

/* Defines -------------------------------------------------------*/
#define LED_GREEN   PB5     // AVR pin where green LED is connected
#define LED_RED     PC0
#define BLINK_DELAY 500
#define Button PD0

#ifndef F_CPU
#define F_CPU 16000000      // CPU frequency in Hz required for delay
#endif

/* Includes ------------------------------------------------------*/
#include <util/delay.h>     // Functions for busy-wait delay loops
#include <avr/io.h>         // AVR device-specific IO definitions
#include <avr/sfr_defs.h>
/* Functions -----------------------------------------------------*/
/**
 * Main function where the program execution begins. Toggle two LEDs
 * when a push button is pressed.
 */
int main(void)
{
    /* GREEN LED */
    // Set pin as output in Data Direction Register...
    DDRB = DDRB | (1<<LED_GREEN);
    // ...and turn LED off in Data Register
    PORTB = PORTB & ~(1<<LED_GREEN);

    /* second LED */
    // WRITE YOUR CODE HERE
      DDRC = DDRC | (1<<LED_RED);
      // ...and turn LED off in Data Register
      PORTC= PORTC & ~(1<<LED_RED);


      // Button
      DDRB = DDRB | (0<<Button);
      PORTD=PORTD| (1<<Button);
    // Infinite loop
    while (1)
    {
        // Pause several milliseconds
```

```
        // WRITE YOUR CODE HERE
        if (bit_is_clear(PIND,0))
        {
        PORTB = PORTB ^ (1<<LED_GREEN);
        PORTC = PORTC ^ (1<<LED_RED);
        _delay_ms(BLINK_DELAY);
        }

    }

    // Will never reach this
    return 0;
}
```