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New Text Document (2).txt
// *****
// Project: Push Button
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// Module description: Demonstrates the application of push button
// *****

#include <avr/io.h>
#include <avr/interrupt.h>
#include <util/delay.h>

/* Connect LED tp portb.0. Pushbutton between portb.4 and GND.*/

/* Read this first it will help you to program.
Enable pull-off register by setting it to high.
Set the push-button-connected switch as input.
Now in software, check if the logic at the button-
connected switch is low then give, delay of 25ms.
After delay check again the switch pin. If logic
level is still at '0' then button was pressed. toggle
the led.*/

char pin_value;

int main (void)
{
    DDRB = 0b00000111;
    PORTB|= (1<<0) | (1<<4);

    for (;;)
    {
        pin_value=(PINB & 0x10); //Checking the PINB register if the button is
pressed        if(pin_value == 0)
        {
            _delay_ms(25);          //if the button is pressed, wait for the value
to stabilise        if(pin_value == 0) //After the delay, checks if the button is
still pressed        {
                                PORTB^=(1<<0); //Toggle the LED at the pin
                                _delay_ms(250); //wait for 250ms before cheking the state
of the button again        }
                                }
        }
    }
}

```