

Universidad Del Valle de Guatemala

Programación de Microcontroladores

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#### Pre - Laboratorio #4

##### Parte #1:

```
/*
 * Universidad del Valle de Guatemala
 * Laboratorio4.c
 *
 * Created: 4/8/2024 11:20:05 PM
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 */

#define F_CPU 16000000

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

uint8_t counter = 0;

/*
*****
*/

void initPCINT1(void);

int main(void)
{
    cli();
    DDRD = 0xFF;
    PORTD = 0;
    UCSR0B = 0;

    PORTC |= (1 << PINC0) | (1 << PINC1);
    DDRC &= ~(1 << PINC0) | ~(1 << PINC1);

    initPCINT1();
    sei();
    while (1)
    {
        // inicia secuencia de adc
        //ADCSRA |= (1<< ADSC);
        //_delay_ms(100);
        PORTD = counter;
    }
}
```

```

    }
}

void initPCINT1(void){
    PCICR |= (1 << PCIE1);
    PCMSK1 |= (1 << PCINT8) | (1 << PCINT9);
}

ISR(PCINT1_vect){
    if (!(PINC & (1 <<PINC0))){
        counter++;
    } else if(!(PINC &(1 <<PINC1))){
        counter--;
    }else{
        counter = counter;
    }
}
}

```

## Parte #2

