EXP 11

Timer Programming

```c
#include<avr/io.h>

#include<util/delay.h>

#include<avr/interrupt.h>


#define SET(port,bit) port|=(1<<bit)

#define CLR(port,bit) port&=~(1<<bit)

#define TOGGLE(PORT,BIT) PORT^=(1<<BIT)


int count=0;

void timer0_init()

{

 CLR(TCCR0A,WGM00);

 CLR(TCCR0A,WGM01);

 CLR(TCCR0B,WGM02);

 TCNT0=0X00;

 SET(SREG,7);

 SET(TIMSK0,TOIE0);

}


void enable_timer()

{

 SET(TCCR0B,CS00);

 CLR(TCCR0B,CS01);

 SET(TCCR0B,CS02);

}


int main()
```

```c
{
  DDRB|=(1<<PB5);
  timer0_init();
  enable_timer();
  while(1)
  {
    if(count==62)
    {
      TOGGLE(PORTB,PB5);
      count=0;
    }
  }
}


ISR(TIMER0_OVF_vect)
{
 count++;
}
```