TIMERS AND COUNTERS ASSIGNMENT

TIMERS

1)write an ECP to generate a delay of 5 milliseconds using timer 0 mode 0.

#include<reg51.h>

void main()

{

TMOD = 0x00;

TH0 = 0X63;

TL0 = 0X18;

TR0 = 1;

while(TF0 == 0);

TR0 = 0;

TF0 = 0;

}

2)write an ECP to generate a delay of 10 milliseconds using timer 0 mode 1.

#include<reg51.h>

void main()

{

TMOD = 0x01;

TH0 = 0XD8;

TL0 = 0XF0;

TR0 = 1;

while(TF0 == 0);

TR0 = 0;

TF0 = 0;

}

COUNTERS

3)write an ECP to count 258 counts using counter 0 and mode1 and power on LED after 258 counts.

#include<reg51.h>

sbit led = P1^0;

void main()

{

int cnt = 0;

TMOD = 0x05;

TR0 = 1;

while(cnt<258)

{

cnt = (TH0\*256) + TL0;

}

led = 0;

TR0 = 0;

}