

Case 1 **Unknown timer**

```
#include<reg51.h>

void Delay(void);

void main (void)
{
    while(1) // infinite loop
    {
        P3 = 0x00; // LED ON
        Delay();
        P3 = 0xff; // LED OFF
        Delay();
    }
}

void Delay(void)
{
    Int i, j;
    for(i=0;i<10;i++)
    {
        for(j=0;j<10000;j++)
        {
        }
    }
}
```

Case 2 all bits

```
#include<reg51.h>

void T1M1Delay(void);

void main (void)
{
    unsigned char x;
    P2=0x55;
```

```

while(1)
{
P2=~P2;
P3 = 0x00;
for(x=0; x<20;x++)
T1M1Delay();
}
}

void T1M1Delay(void)
{
TMOD= 0X10;
TL1= 0XFE;
TH1=0XA5;
TR1=1;
while(TF1==0);
TR1=0;
TF1=0;
}

```

Case 3 hexcounter

```

#include <reg51.h>

void delay()
{
unsigned int i, j;
for(i = 0; i < 255; i++)
{
for(j = 0; j < 255; j++)
{ }
}
}

void main()

```

```
{  
  unsigned int z;  
  while(1)  
  {  
    for(z = 0x00; z<=0xff; z++)  
    {  
      P1 = z;  
      delay();  
    }  
  }  
}
```