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## **EXPERIMENT-10**

### **PROGRAMS ON EXTERNAL INTERRUPT (HARDWARE)**

**AIM:** To execute the following programs on external interrupt by using 8051 tool-kit and Keil software.

#### **TOOLS USED:**

- 8051 tool-kit
- Keil software

#### **TASK-1**

A switch is connected to pin P3.2. When the switch is pressed, the corresponding line goes low Display 0A at port 0. Write a C program to blink alternate LEDS connected to Port 1 Simultaneously.

```
1  #include <reg51.h>
2  sbit SW =P3^2;
3  unsigned int i;
4  void extint0() interrupt 0
5  {
6      P0=0x0A;
7  }
8  //void delay_ms(unsigned int j);
9  void main()
10 //unsigned int i;
11 {
12 }
13 SW=1;
14 IE=0x81;
15 while(1)
16 {
17     P1=0x00;
18     {}
19     {}
20     for(i=250;i>0;i--)
21         P1=0xAA;
22     for(i=250;i>0;i--)
23         P1=0x00;
```

## **TASK-2**

A switch is connected to pin P3.3. When the switch is pressed, the corresponding line goes low Display 0A at port 0. Write a C program to blink alternate LEDS connected to Port 2 Simultaneously.

```
1  #include <reg51.h>
2  sbit SW =P3^3;
3  unsigned int i;
4  void extint0() interrupt 0
5  {
6      P0=0x0A;
7  }
8  //void delay_ms(unsigned int j);
9  void main()
10 //unsigned int i;
11 {
12 }
13 SW=1;
14 IE=0x81;
15 while(1)
16 {
17     P2=0x00;
18     {}
19     {}
20     for(i=250;i>0;i--)
21     P2=0xAA;
22     for(i=250;i>0;i--)
23 }
```

**RESULT:** The given programs on external interrupts have been executed and the outputs have been verified.

## **OUTPUT VERIFICATION:**

