8051(micro-controller) (Trainer: Dr. Jeevan K M)

AVVA PRAVEEN BABU

BU21EECE01000527

Learning objective:

- LED blinking using micro-controller

- **Inputs:** Switches
- □ **Outputs:** LEDs

Logic:

- LEDs are connected to Port 1 (P1) of the 8051 microcontroller.
- The code involves passing hexadecimal values to Port 1, which determines the state of each LED.
- A delay function is used to create the blinking effect by toggling the LEDs on and off.

Common Mistakes:

- **Project Creation in Keil Software:** Errors in creating a project or missing the step of creating a target before running the code.
- **Syntax and Indentation Errors:** Mistakes in code syntax and improper indentation can lead to compilation errors.
- **Port Confusion:** Errors in connecting the LEDs to the correct ports on the microcontroller.

Result :-

C:\Users\chall\OneDrive\Desktop\EMBEDDEDKEIL\DAY1-embedded.uvproj - µVision [Non-Commercial Use License]

File Edit View Project Flash Debug Peripherals Tools SVCS Window Help

Target 1

Project

Project: DAY1-embedded

Target 1

Source Group 1

STARTUP.A51

LCD_printing.c

git.zip | blinking_led.c*

```
30  // sw1 =0;
31  // sw2 = 0;
32    while(1)
33        {
34          if(sw1==0 && sw2 ==0 )
35          {
36           P1 = 0x00;
37          }
38           else if(sw1 ==0 && sw2==1)
39           {
40           P1 = 0xF0;
41           delay(50);
42           P1 = 0x00;
43           delay(50);
44
45           }
46           else if(sw1 ==1 && sw2 == 0)
47           {
48           P1=0x0F;
49           delay(50);
50           P1 = 0x00;
51           delay(50);
52           }
53           else if(sw1==1&& sw2==1)
54           {
55           P1 = 0xFF;
56           delay(50);
57           P1 = 0x00;
58           delay(50);*/
59  }
60
61
62
63  void delay(unsigned int t)
64  {
65    unsigned int i,j;
```