* **LEARNING OBJECTIVE**
* LED Blinking using 8051 Microcontroller and Keil C – AT89C518051 Microcontroller is a programmable device which is used for controlling purpose.
* Basically 8051 controller is Mask programmable means it will programmed at the time of manufacturing and will not programmed again, there is a derivative of 8051 microcontroller, 89c51 micro controller which is re-programmable.
* **Inputs;**
* There is no explicit input port defined in your code snippet.
* However, the input can be inferred from the delay loop. The delay function (delay(unsigned int t)) is likely waiting for some external event (such as a button press) before proceeding.
* **Output:**
* The output port is P1 (Port 1).
* You’re sequentially turning on individual bits of P1 (from bit 0 to bit 7) to control the LEDs.
* Each bit corresponds to an output pin (P1.0 to P1.7), which can be connected to LEDs or other devices.
* **LOGIC**

#include <reg51.h>

 void delay(unsigned int);

 void  main(void)

 {

  while(1)

  {

    P1=0x01;

        delay(50);

        P1=0x02;

        delay(50);

        P1=0x04;

        delay(50);

        P1=0x08;

        delay(50);

        P1=0x10;

        delay(50);

        P1=0x20;

        delay(50);

        P1=0x40;

        delay(50);

        P1=0x80;

        delay(50);

    }

}

void delay(unsigned int t)

{

    unsigned int i,j;

    for(i=0;i<t;i++)

    for(j=0;j<1275;j++);

}

* **RESULT**
* The code you provided sequentially turns on individual bits of the P1 port (Port 1) in an 8051 microcontroller. Each bit corresponds to an output pin (P1.0 to P1.7), which can be connected to LEDs or other devices. Here’s what happens:
* The LED connected to P1.0 turns on.
* After a delay of 50 milliseconds, the LED connected to P1.1 turns on.
* This pattern continues for all bits (P1.2 to P1.7), with each LED turning on one after the other**.**