**EXPERIMENT NO:**

**ROLL No:**

AIM: Develop C program for LED Blinking.
Instruments Required:

| Sr. No | Instruments Name | Value | Qty |
|---|---|---|---|
| 1 | Desktop PC with keill nstalled | - | 1 per 2 students |
| 2 | 8051 trainer kit | - | 1 |
| 3 | Proteus 8 pro. | | 1 per 2 student |

Theory:

The switch is an input device. When interfaced with microcontroller, it can be used to control o ther peripherals connected to the microcontroller. It basically “makes” the electrical circuit by establishing the flow of current. Or “breaks” it by interrupting the flow of current.

A switch, when not in use, has no definite value associated with it. Correspondingly, the pin of the uC that it is attached to has no definitive value either. It is said to be floating between 0 or 1. Hence a resistor is connected between the switch and VCC or GND. To assign a specific value to it once and for all.

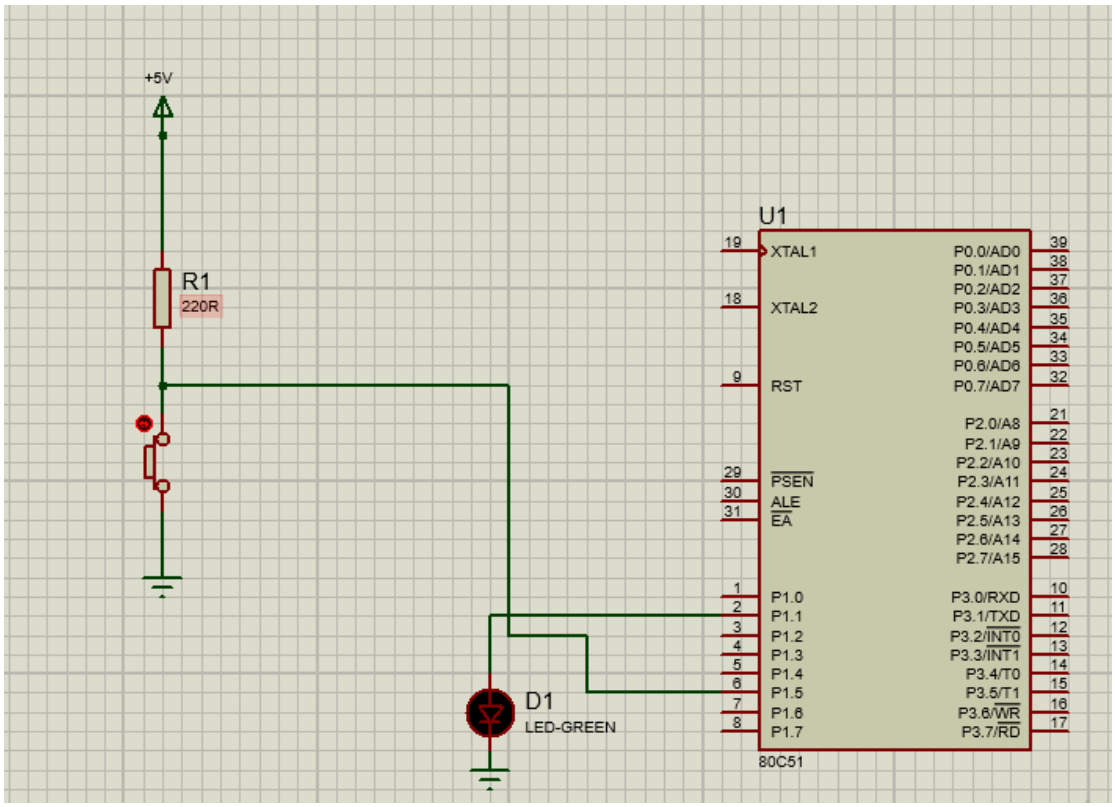
Code:

```
#include<reg51.h>
sbit switch1 = P1^5;
sbit led1 = P1^1;
void main(void)
{
 led1 = 0; // make led an output
 switch1 = 1; //make switch as input
 while(1)
 {
                    if(switch1 == 0)
                    {
            led1 = 1;


                    }
                    else
                    {
                              led1=0;
                    }
 }

}
```

**Result:**


+5V
R1
220R
D1
LED-GREEN
U1
XTAL1
XTAL2
RST
PSEN
ALE
EA
P1.0
P1.1
P1.2
P1.3
P1.4
P1.5
P1.6
P1.7
P0.0/AD0
P0.1/AD1
P0.2/AD2
P0.3/AD3
P0.4/AD4
P0.5/AD5
P0.6/AD6
P0.7/AD7
P2.0/A8
P2.1/A9
P2.2/A10
P2.3/A11
P2.4/A12
P2.5/A13
P2.6/A14
P2.7/A15
P3.0/RXD
P3.1/TXD
P3.2/INT0
P3.3/INT1
P3.4/T0
P3.5/T1
P3.6/WR
P3.7/RD
80C51