

Program no :- 2

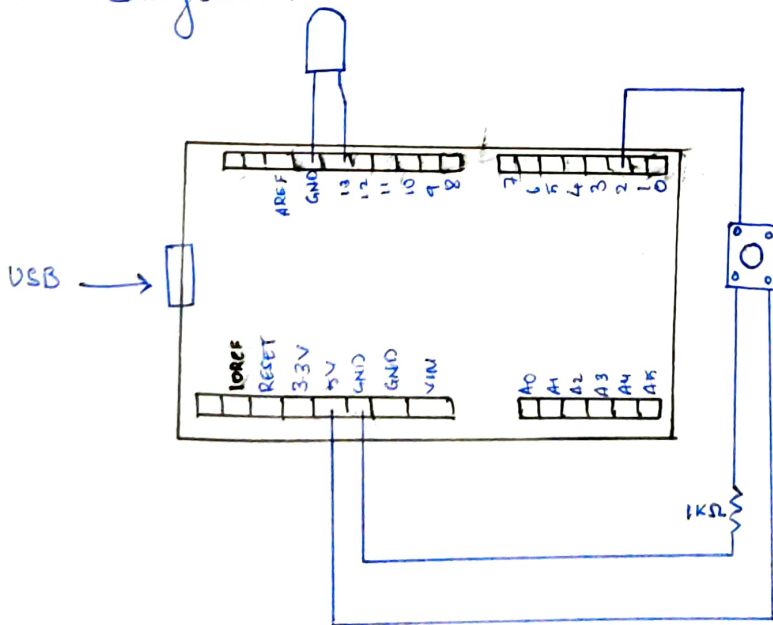
Program Title :- Push button

Aim: To demonstrate ON/OFF of a LED using a push button [Digital output]

Hardware Required:

- 1) Arduino Uno board
- 2) LED
- 3) push button
- 4)  $1\text{K}\Omega$  resistor
- 5) connecting wires

Circuit diagram:



Code:

```
int button = 0;  
void setup()  
{  
    pinMode(13, OUTPUT);  
    pinMode(2, INPUT);  
}  
void loop  
{  
    button = digitalRead(2);  
    if (button == HIGH)  
    {  
        digitalWrite(13, HIGH);  
    }  
    else  
    {  
        digitalWrite(13, LOW);  
    }  
}
```

Observation/output:

When the button is pushed the LED lights up and when the button is released the LED turns off.