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1BM18CS090

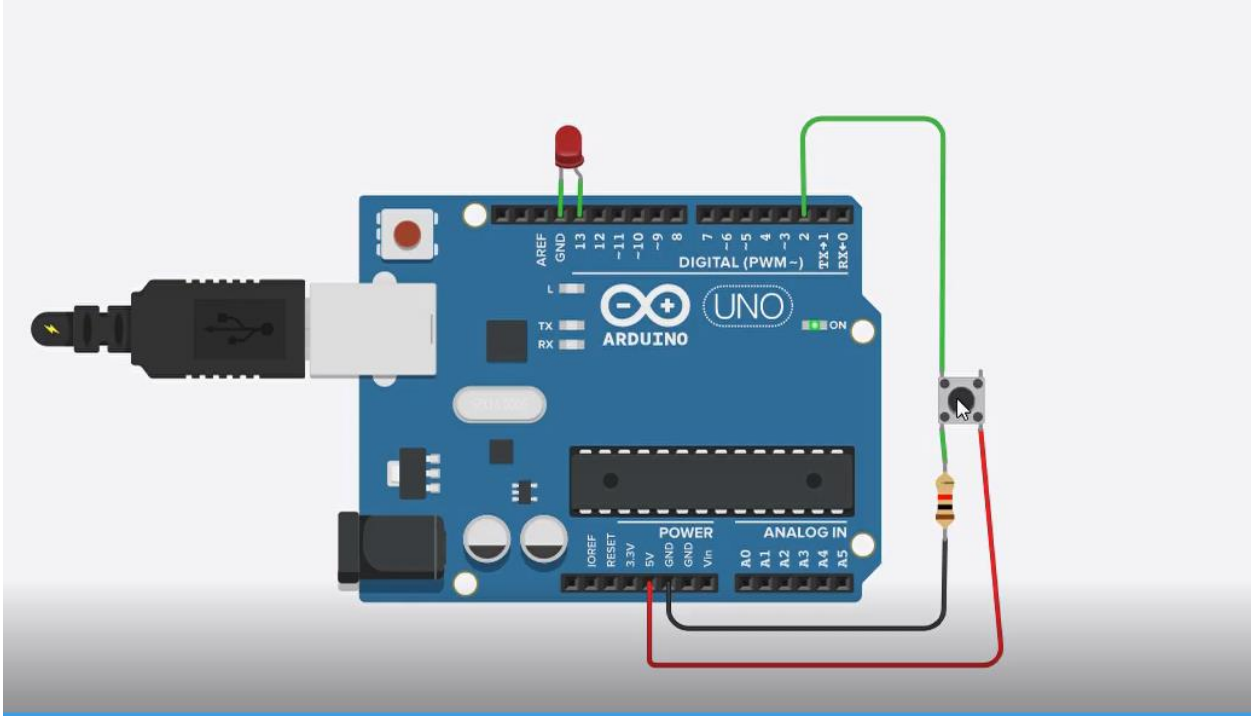
PROGRAM TITLE: LED USING PUSHBUTTON

Aim: DEMONSTRATE TO SHOW ON/OFF OF A LED USING PUSHBUTTON

Hardware Required:

- Arduino Board
- LED
- Pushbutton
- Resistor

Circuit Diagram:



Write-Up:

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Program Title: LED Using Pushbutton.

Aim: Demonstrate to show ON/OFF of a LED using Pushbutton (Digital output)

→ Hardware Required:-
- LED
- Arduino Board
- Pushbutton, Resistor.

Code:

```
const int buttonPin = 2;
const int ledPin = 13;
int buttonState = 0;

void setup()
{
  pinMode(ledPin, OUTPUT);
  pinMode(buttonPin, INPUT);
}

void loop()
{
  buttonState = digitalRead(buttonPin);
    if(buttonState == HIGH)
```

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```
{
   digitalWrite(ledPin, HIGH);
}
else
{ digitalWrite(ledPin, LOW);
}
}
```

CODE:

```
const int
buttonPin=2;
                    const int ledPin=13;
                    int buttonState=0;
                    void setup()
                    {
                     pinMode(ledPin,OUTPUT);  // declare LED as output
                     pinMode(buttonPin, INPUT);    // declare pushbutton as input
                    }

                    void loop()
                    {
                     buttonState = digitalRead(buttonPin);  // read input value
                     if (buttonState== HIGH)
                     {
                       digitalWrite(ledPin, HIGH);
                     }
                     else
                     {
                       digitalWrite(ledPin, LOW);
                     }
                    }
```

Observation /Output:

On/Off Of A Led Using Pushbutton