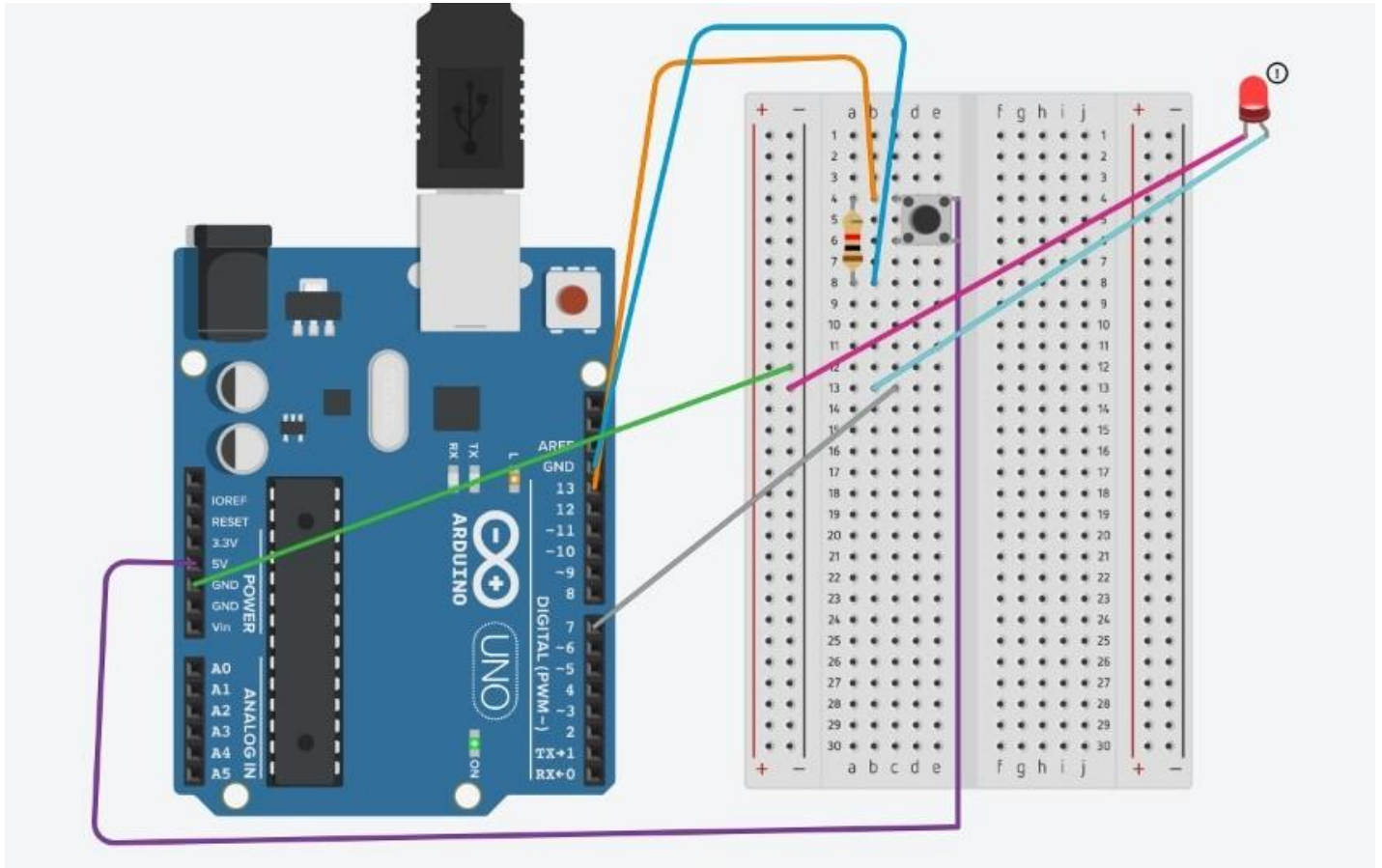


# ***AIM : Blink LED using Switch.***

**APPARATUS** : 1LED, breadboard, wires, arduino, switch.

**CIRCUIT DIAGRAM** :



**THEORY** :

The LED has one p junction and n junction inside it, p is longer while n is shorter. Breadboard have network of connection inside it. Switch regulates the power when the it is high means close and low means open.

**CODE** :

```
void setup() {  
  pinMode(13,INPUT);  
  pinMode(7,OUTPUT);  
  
}
```

```
void loop() {  
  if(6==HIGH){  
    digitalWrite(13,HIGH);  
  }  
  else{  
    digitalWrite(13,LOW);  
  }  
}
```

### **LEARNING AND OBSERVATION :**

1. How to connect switch in the circuit and where to connect.
2. Voltage of arduino is 5V.
3. Always in circuit ground should always have least resistance.
4. If pin 13 is low means switch is open.
5. If pin 13 is high means switch is closed.

### **PROBLEM & TROUBLESHOOTING:**

1. Bulb get fused when connected in circuit.
2. Connection of switch is wrong.

### **LEARNING OUTCOMES:**

1. Use of ground and resistance in circuit.
2. How to connect switch and use of switch in circuit.
3. Resistance must be of 10 kilo ohm not less than that.
4. Switch should be connected correct in the circuit.