

Exercise # 2a – Interfacing LED With Arduino UNO

Aim: To interface LED with Arduino UNO.

Apparatus Required:

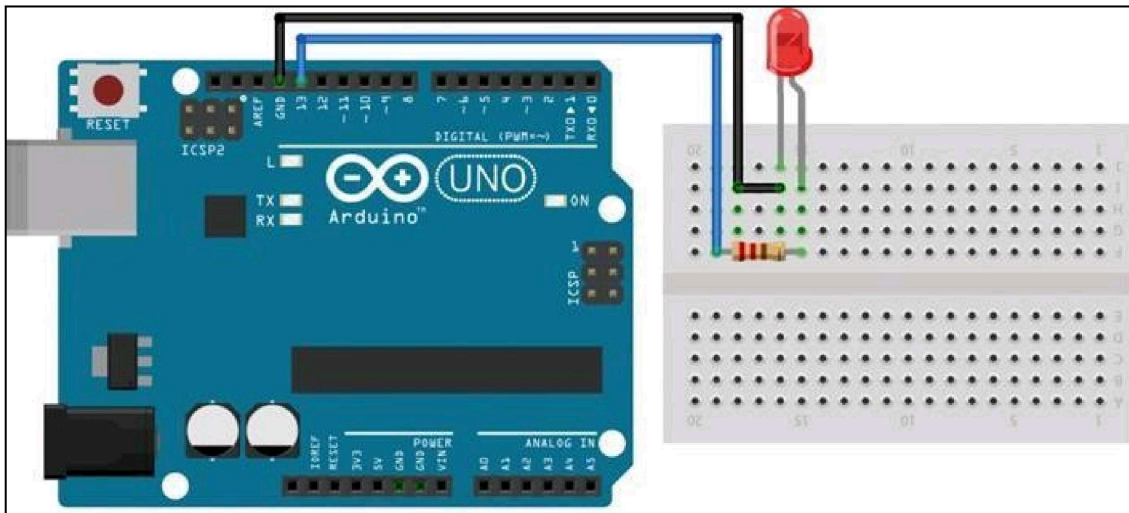
Sign Number	Name of the Equipment	Quantity
1	Arduino UNO	1
2	Computer with Arduino IDE	1
3	USB Cable	1
4	LED	1
5	330Ω Resistor	1
6	Breadboard	1
7	Jumper Wires	As Required

Theory:

Light Emitting Diode (LED) is a widely used standard source of light in electrical equipment. It has a widerange of applications ranging from your mobile phone to large advertising billboards.

Here, an LED is connected to one of Arduino's digital pins via 330Ω resistor. Whenever the respective pin is set HIGH,current flows via LED and hence it glows.

Circuit Diagram:



Code:

```
#define LED 13

void setup()
{
  pinMode(LED, OUTPUT);
}

void loop()
{
  digitalWrite(LED, HIGH);
  delay(1000); digitalWrite(LED,
  LOW); delay(1000);
}
```

Result: Hence, a LED is interfaced with Arduino UNO and is made to blink successfully.