JAVA IOT DEVELOPER LAB

LAB -5

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SUBMITTED TO:

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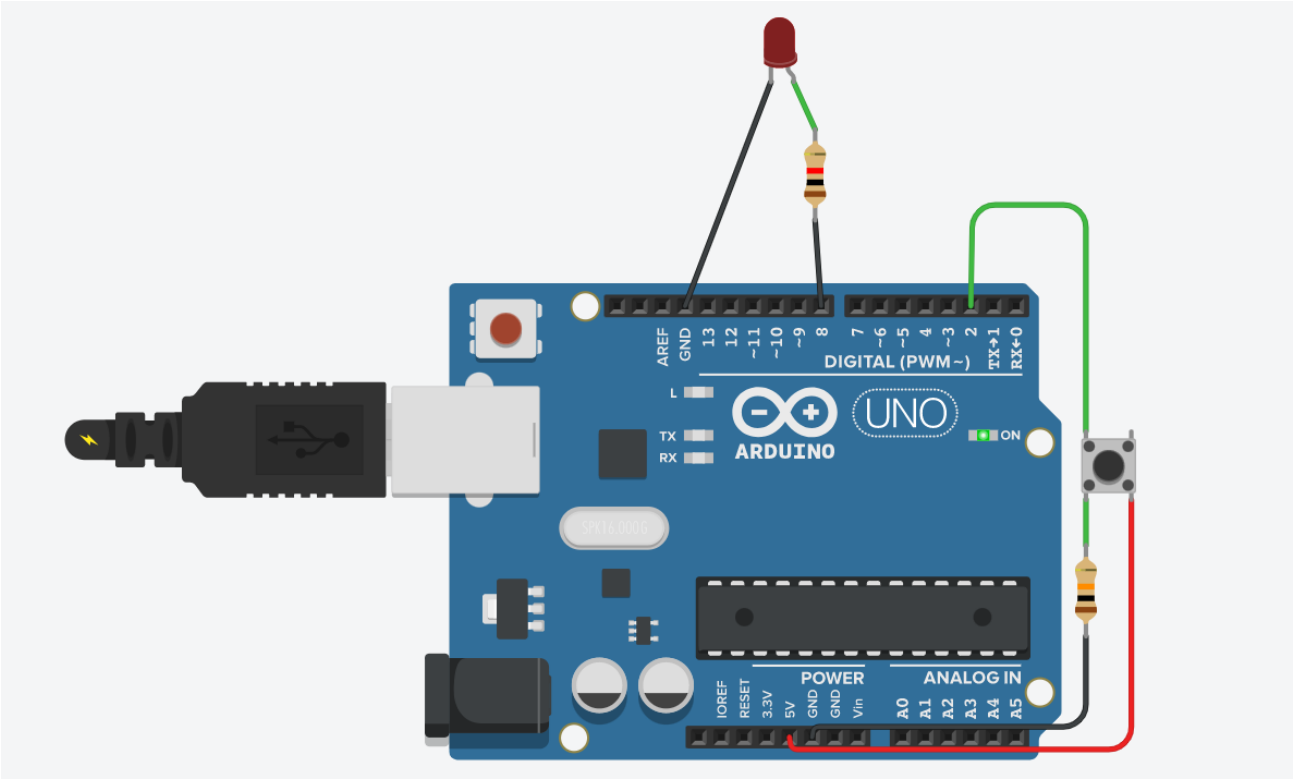
Questions :-

Q1. Blink LED without using Delay().

```
// C++ code
//

const long interval = 1000;
int ledState = LOW;
unsigned long previousMillis = 0;
int buttonState = 0;

void setup()
{
  pinMode(2, INPUT);
  pinMode(8, OUTPUT);
}

void loop()
{
  // read the state of the pushbutton value
  buttonState = digitalRead(2);
  // check if pushbutton is pressed.  if it is, the
  // buttonState is HIGH
  unsigned long currentMillis = millis();
  if (buttonState == HIGH) {

    if (currentMillis - previousMillis >= interval) {
    // save the last time you blinked the LED
    previousMillis = currentMillis;

    // if the LED is off turn it on and vice-versa:
    if (ledState == LOW) {
      ledState = HIGH;
    } else {
      ledState = LOW;
    }

    // set the LED with the ledState of the variable:
    digitalWrite(8, ledState);
  }
  } else {
    // turn LED off
    digitalWrite(8, LOW);
  }
  // Delay a little bit to improve simulation performance
  delay(10);
}
```



Q2. Use one slider/ toggle switch and two LEDs.

```
// C++ code
//

int buttonState = 0;

void setup()
{
  pinMode(2, INPUT);
  pinMode(8, OUTPUT);
  pinMode(5, OUTPUT);
}

void loop()
{
  // read the state of the pushbutton value
  buttonState = digitalRead(2);
  // check if pushbutton is pressed.  if it is, the
  // buttonState is HIGH
  if (buttonState == HIGH) {
    // turn LED on
    digitalWrite(8, HIGH);
    digitalWrite(5,LOW);
  } else {
    // turn LED off
    digitalWrite(8, LOW);
    digitalWrite(5,HIGH);
  }
```

```
  // Delay a little bit to improve simulation performance
  delay(10);
}
```