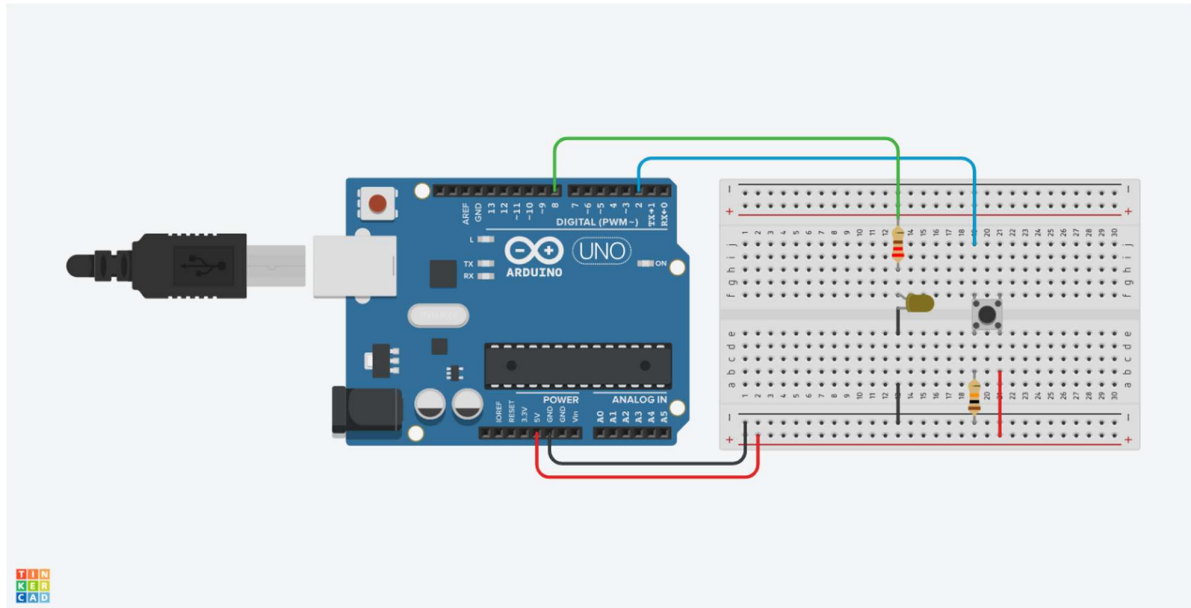


Name: Nilotpal Bose

Project: Embedded Systems (February 2025)

Project-2:

Photo of the Circuit:



Program:

```
#define switchPin 2    // Push-button input
#define ledPin 8       // LED output
String inputString = ""; // Store serial input

void setup() {
    pinMode(switchPin, INPUT);
    pinMode(ledPin, OUTPUT);
    Serial.begin(9600);
}

void loop() {
    // Read switch status and print
    int switchState = digitalRead(switchPin);

    if (switchState == HIGH) {
```

```

    Serial.println("Switch is PRESSED");
    delay(800);
}
else {
    Serial.println("Switch is NOT PRESSED");
    delay(800);
}

// Check for incoming serial data
if (Serial.available()) {
    inputString = Serial.readString();

    if (inputString == "ON") {
        digitalWrite(ledPin, HIGH);
        Serial.println("LED turned ON");
    }
    else if (inputString == "OFF") {
        digitalWrite(ledPin, LOW);
        Serial.println("LED turned OFF");
    }
    else {
        Serial.println("Unknown command. Use ON or OFF.");
    }
}

delay(300); // Small delay for stability
}

```

Output (Showing Two Screenshots of Serial Monitor):

