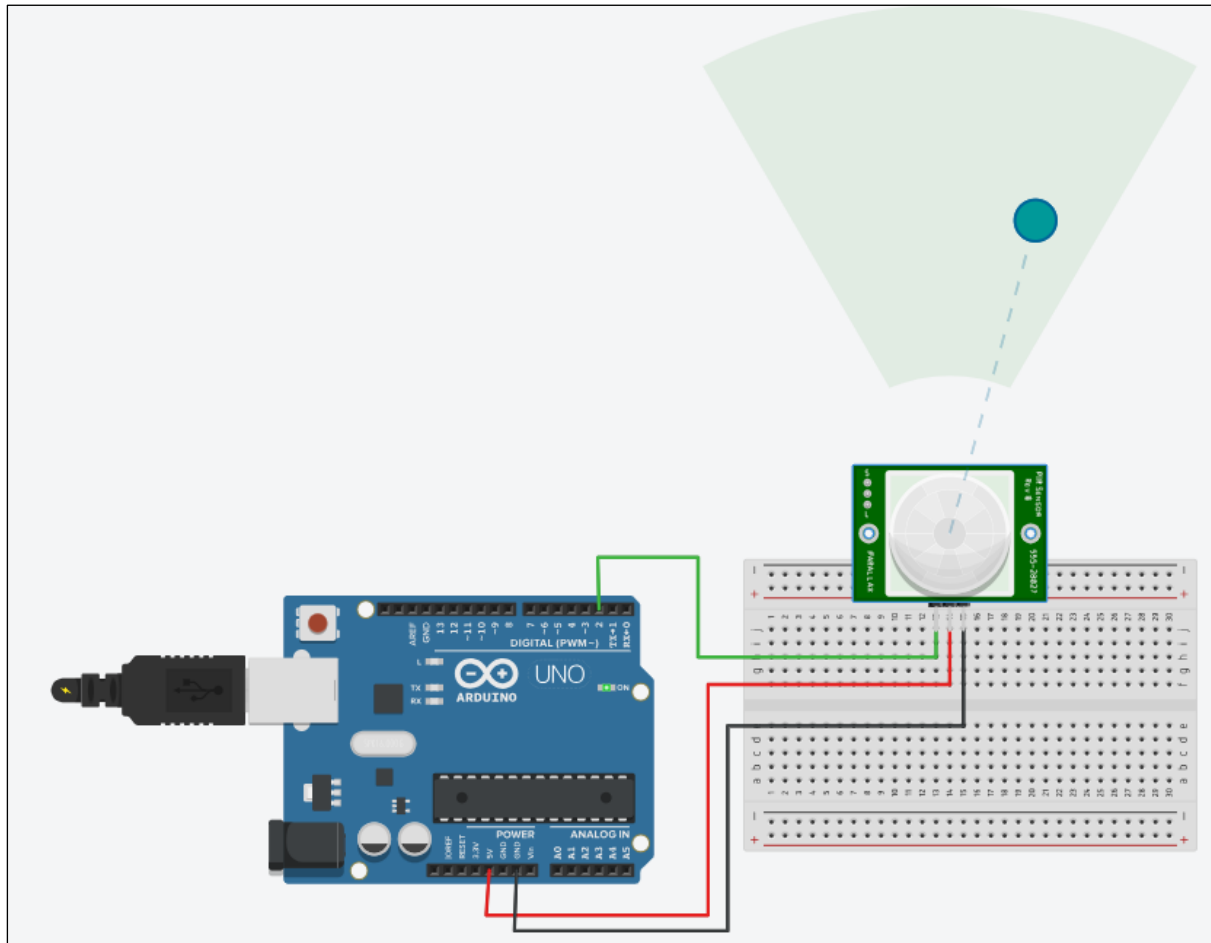


SIT 315 PROGRAMMING PARADIGMS

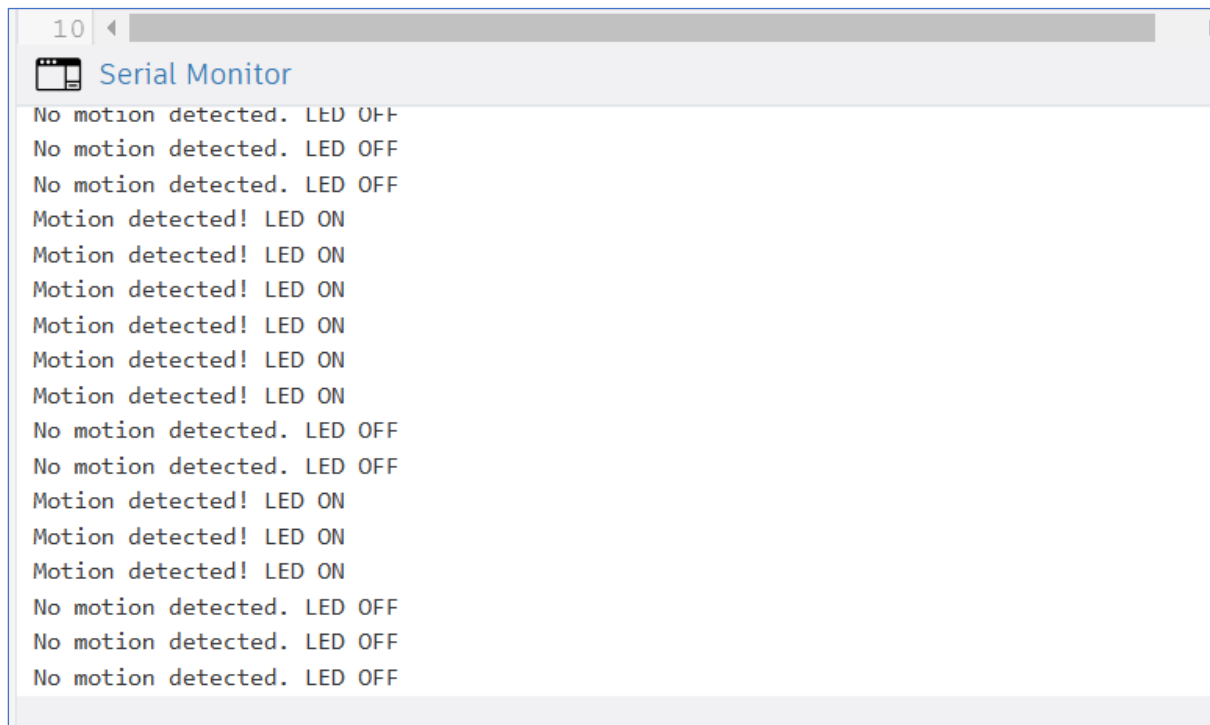
TASK M1_T1P

Git Hub Link: https://github.com/Diya397/Task-M1_T1P.git

Diagram



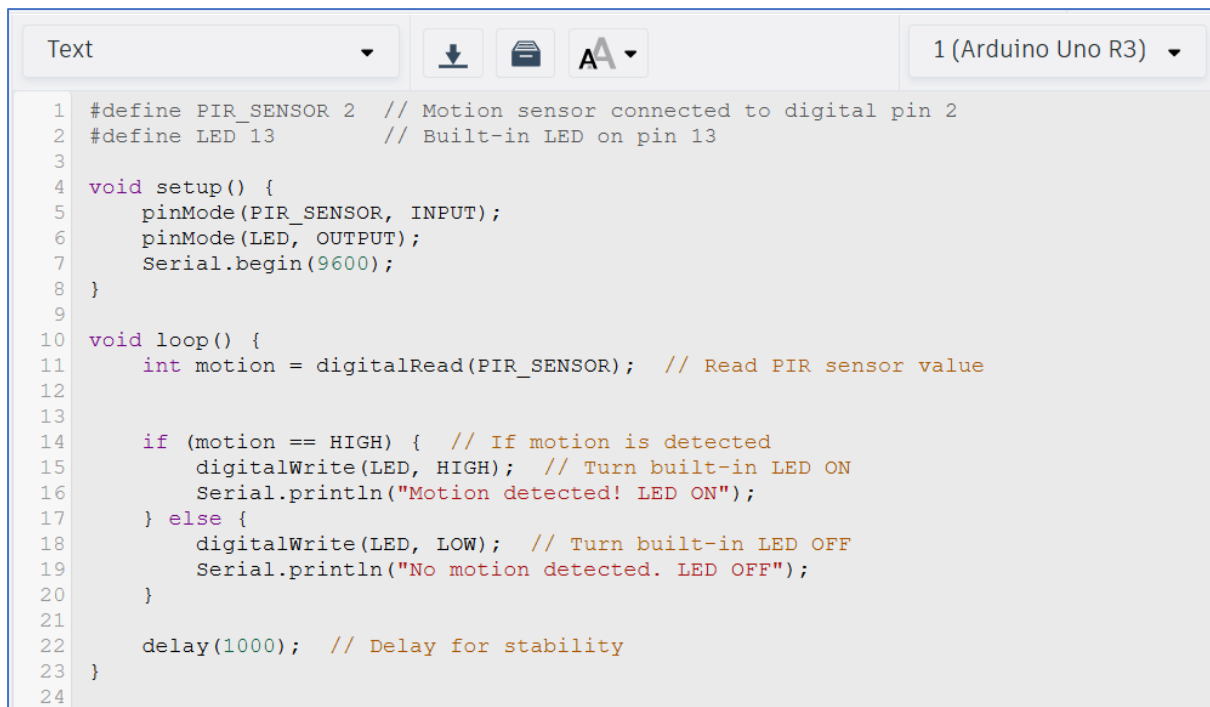
Serial Monitor Readings



The screenshot shows the Serial Monitor window in the Arduino IDE. The title bar says "Serial Monitor". The text area displays the following output:

```
No motion detected. LED OFF
No motion detected. LED OFF
No motion detected. LED OFF
Motion detected! LED ON
Motion detected! LED ON
Motion detected! LED ON
Motion detected! LED ON
Motion detected! LED ON
Motion detected! LED ON
No motion detected. LED OFF
No motion detected. LED OFF
Motion detected! LED ON
Motion detected! LED ON
Motion detected! LED ON
No motion detected. LED OFF
No motion detected. LED OFF
No motion detected. LED OFF
```

Code



The screenshot shows the code editor in the Arduino IDE. The top bar indicates the board is "1 (Arduino Uno R3)". The code is as follows:

```
1  #define PIR_SENSOR 2  // Motion sensor connected to digital pin 2
2  #define LED 13        // Built-in LED on pin 13
3
4  void setup() {
5      pinMode(PIR_SENSOR, INPUT);
6      pinMode(LED, OUTPUT);
7      Serial.begin(9600);
8  }
9
10 void loop() {
11     int motion = digitalRead(PIR_SENSOR);  // Read PIR sensor value
12
13
14     if (motion == HIGH) {  // If motion is detected
15         digitalWrite(LED, HIGH);  // Turn built-in LED ON
16         Serial.println("Motion detected! LED ON");
17     } else {
18         digitalWrite(LED, LOW);  // Turn built-in LED OFF
19         Serial.println("No motion detected. LED OFF");
20     }
21
22     delay(1000);  // Delay for stability
23 }
24
```