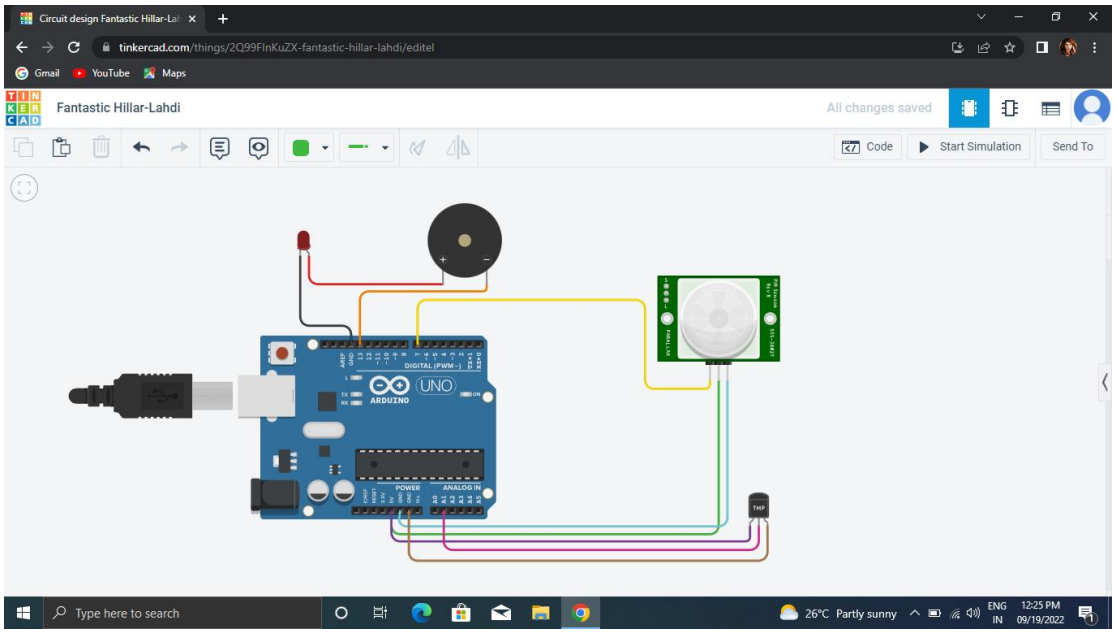
Assignment - 1

Circuit Diagram:



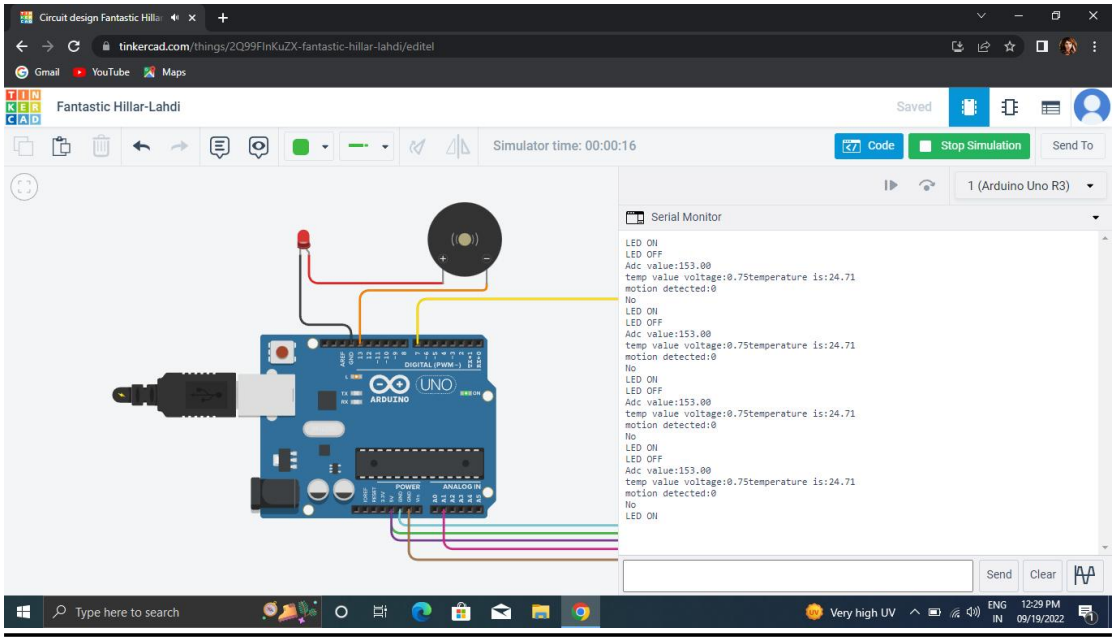
Code:

```
// C++ code
//
void setup()
{
   pinMode(LED_BUILTIN, OUTPUT);
   pinMode(13, OUTPUT);
   pinMode(7, OUTPUT);
   Serial.begin(9600);
}

void loop()
{
   digitalWrite(LED_BUILTIN, HIGH);
   Serial.println("LED ON");
   delay(1000);
   digitalWrite(LED_BUILTIN, LOW);
   Serial.println("LED OFF");
```

```
    delay(1000);
    double a = analogRead(A1);
    Serial.print("Adc value:");
    Serial.println(a);
    double v = a/1024;
    double tvolt = v*5;
    Serial.print("temp value voltage:");
    Serial.print(tvolt);
    double O = tvolt-0.5;
    double t = O*100;
    Serial.print("temperature is:");
    Serial.println(t);
    delay(2000);
    if(t>=50)
    {
       digitalWrite(a, HIGH);
    }
    else
    {
       digitalWrite(9, LOW);
    }
    int m = digitalRead(7);
    Serial.print("motion detected:");
    Serial.println(m);
    if(m==1)
    {
       Serial.println("Yes");
    }
    else
    {
       Serial.println("No");
    }
}
```

Output:


Circuit design Fantastic Hillar
tinkercad.com/things/2Q99FInKuZX-fantastic-hillar-lahdi/editel
Gmail
YouTube
Maps
Fantastic Hillar-Lahdi
Saved
Simulator time: 00:00:16
Code
Stop Simulation
Send To
1 (Arduino Uno R3)
Serial Monitor
LED ON
LED OFF
Adc value:153.00
temp value voltage:0.75temperature is:24.71
motion detected:0
No
LED ON
LED OFF
Adc value:153.00
temp value voltage:0.75temperature is:24.71
motion detected:0
No
LED ON
LED OFF
Adc value:153.00
temp value voltage:0.75temperature is:24.71
motion detected:0
No
LED ON
LED OFF
Adc value:153.00
temp value voltage:0.75temperature is:24.71
motion detected:0
No
LED ON
Send
Clear
Type here to search
Very high UV
ENG
IN
12:29 PM
09/19/2022