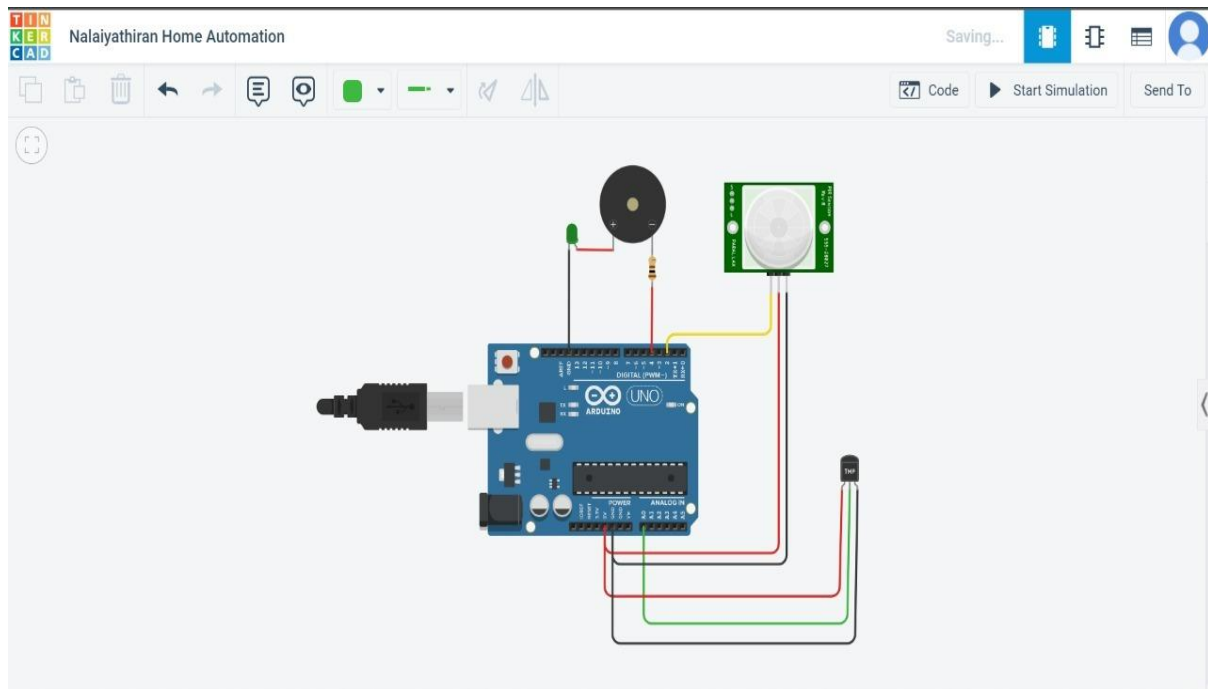


# ASSIGNMENT-1

## CIRCUIT:



## CODE:

```
void setup()
{
    pinMode(2, INPUT);
    pinMode(4, OUTPUT);
    Serial.begin(9400);
}
```

```
void loop()
{
    double tempValues = analogRead(A0);
    double temp = (((tempValues/1024)*500)-50);
    Serial.print("Temperature in Celsius: ");
    Serial.println(temp);
    int pirValue = digitalRead(2);
    if(temp>=50 || pirValue==1)
    {
        digitalWrite(4, HIGH);
        Serial.println("Alert!!!");
        delay(1000);
    }
    else
    {
        digitalWrite(4, LOW);
    }
}
```

## OUTPUT:

TIN K E R C A D Nalaiyathiran Home Automation Saving... Simulator time: 00:00:01.055

Code Stop Simulation Send To

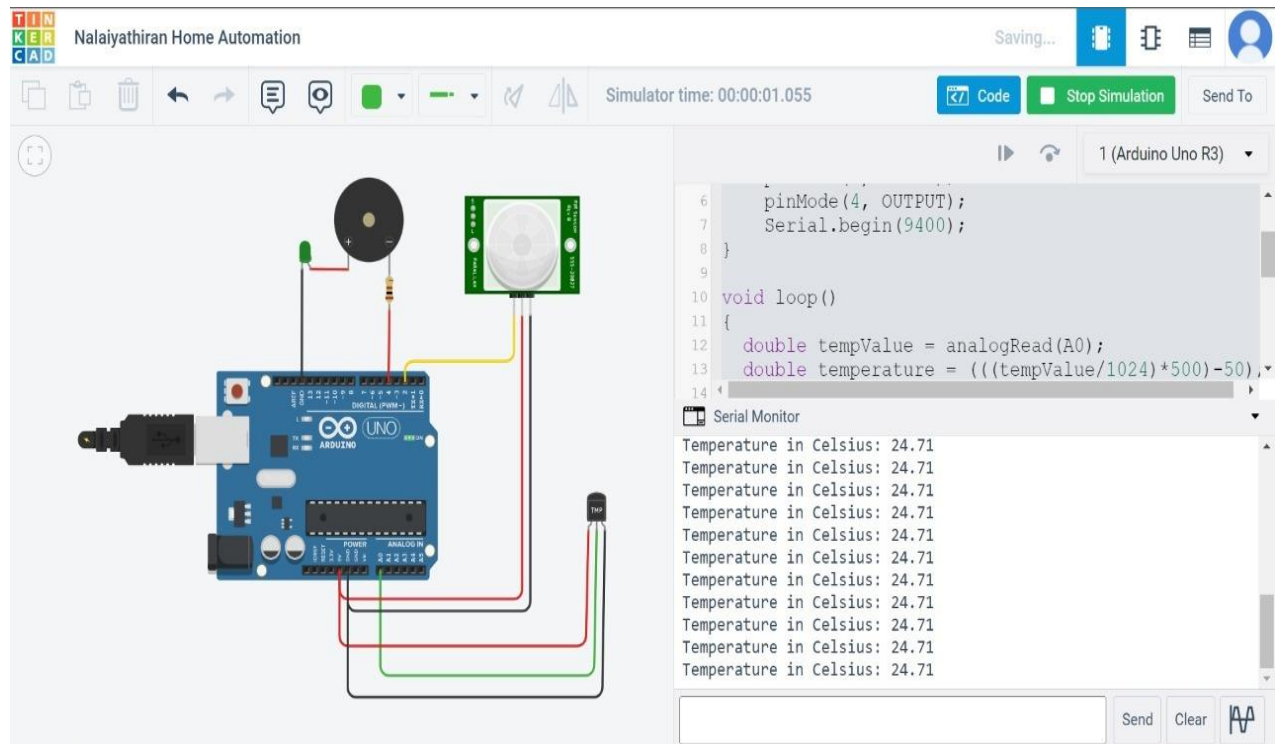
1 (Arduino Uno R3)

```
6 pinMode(4, OUTPUT);
7 Serial.begin(9400);
8 }
9
10 void loop()
11 {
12   double tempValue = analogRead(A0);
13   double temperature = (((tempValue/1024)*500)-50);
14 }
```

Serial Monitor

Temperature in Celsius: 24.71  
Temperature in Celsius: 24.71  
Temperature in Celsius: 24.71  
Temperature in Celsius: 24.71  
Temperature in Celsius: 24.71  
Temperature in Celsius: 24.71  
Temperature in Celsius: 24.71  
Temperature in Celsius: 24.71  
Temperature in Celsius: 24.71  
Temperature in Celsius: 24.71

Send Clear



TIN K E R C A D Nalaiyathiran Home Automation Saving... Simulator time: 00:00:06

Code Stop Simulation Send To

1 (Arduino Uno R3)

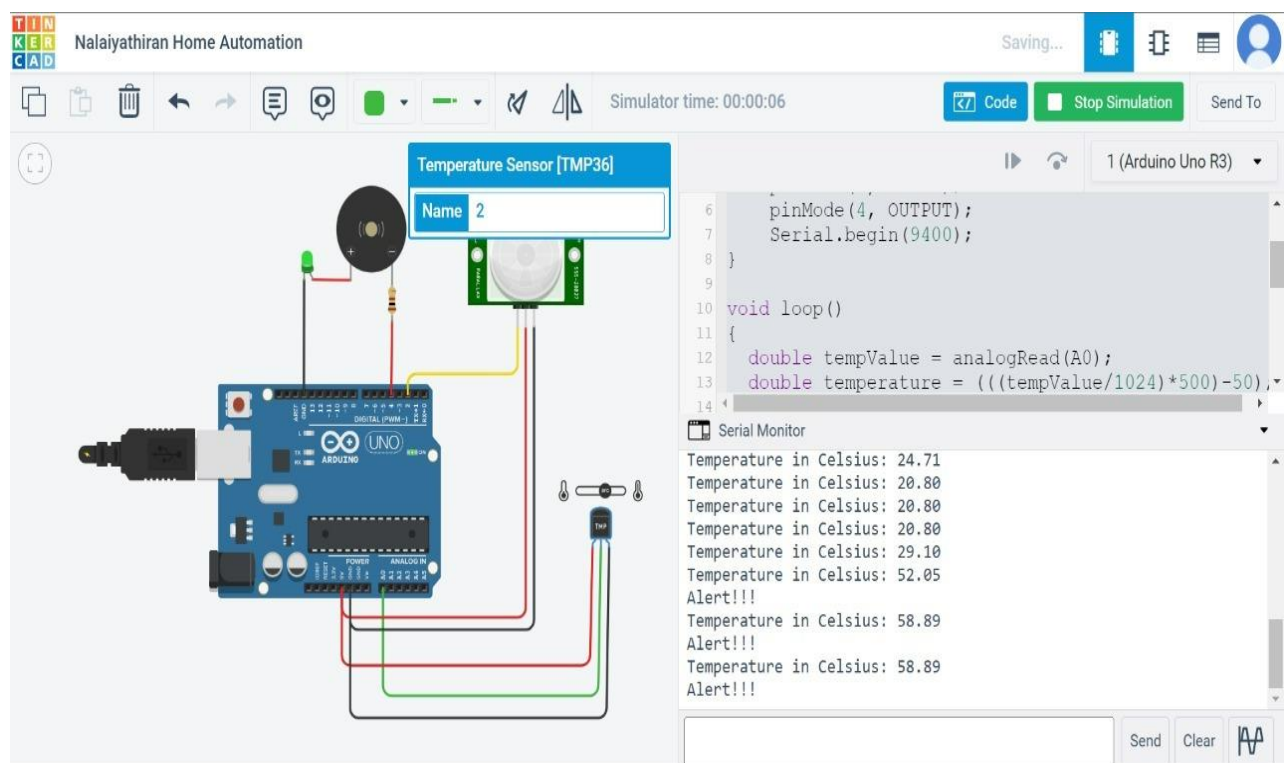
```
6 pinMode(4, OUTPUT);
7 Serial.begin(9400);
8 }
9
10 void loop()
11 {
12   double tempValue = analogRead(A0);
13   double temperature = (((tempValue/1024)*500)-50);
14 }
```

Serial Monitor

Temperature in Celsius: 24.71  
Temperature in Celsius: 20.80  
Temperature in Celsius: 20.80  
Temperature in Celsius: 20.80  
Temperature in Celsius: 20.80  
Temperature in Celsius: 29.10  
Temperature in Celsius: 52.05  
Alert!!!  
Temperature in Celsius: 58.89  
Alert!!!  
Temperature in Celsius: 58.89  
Alert!!!

Send Clear

Temperature Sensor [TMP36]  
Name 2



TIN  
KER  
CAD

Nalaiyathiran Home Automation

Saving...

Simulator time: 00:00:20

Code

Stop Simulation

Send To

1 (Arduino Uno R3)

```
6   pinMode(4, OUTPUT);
7   Serial.begin(9400);
8
9
10  void loop()
11  {
12      double tempValue = analogRead(A0);
13      double temperature = (((tempValue/1024)*500)-50);
14  }
```

Serial Monitor

Temperature in Celsius: 39.84  
Temperature in Celsius: 39.84  
Temperature in Celsius: 39.84  
Temperature in Celsius: 39.84  
Temperature in Celsius: 39.84  
Temperature in Celsius: 39.84  
Alert!!!  
Temperature in Celsius: 39.84  
Alert!!!  
Temperature in Celsius: 39.84  
Alert!!!

Send Clear