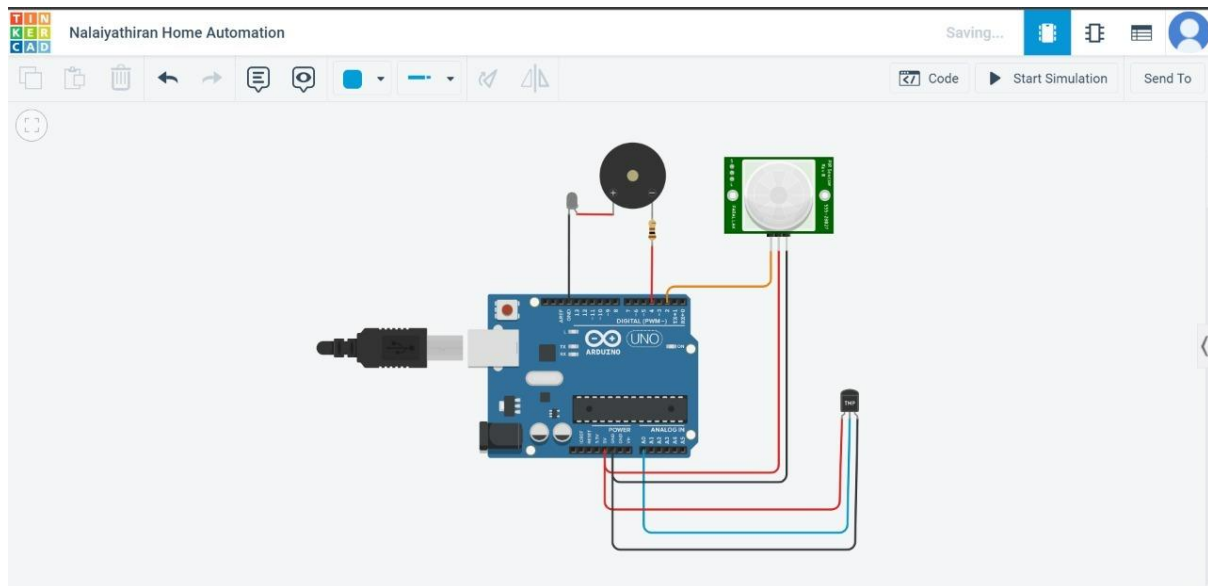


# ASSIGNMENT-1

## CIRCUIT:



## CODE:

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

```
void loop()
{
  double temp = analogRead(A0);
  double temp = (((temp/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 KEE CAD Nalaiyathiran Home Automation

Simulator time: 00:00:00.556

Code Stop Simulation Send To

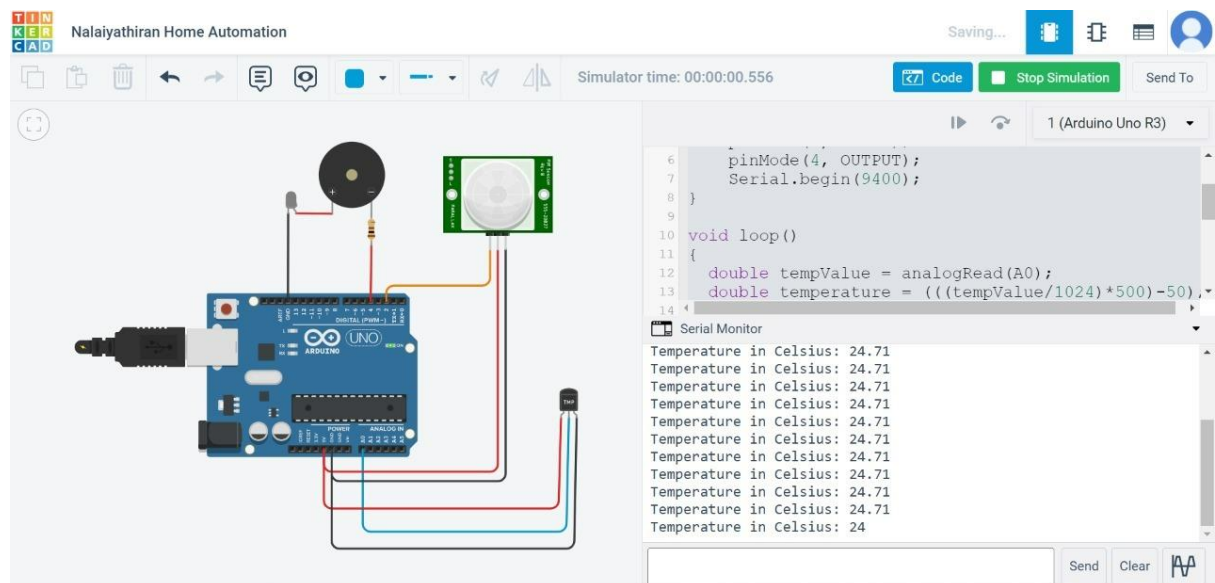
1 (Arduino Uno R3)

```
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  
Temperature in Celsius: 24

Send Clear



TIN KEE CAD Nalaiyathiran Home Automation

Simulator time: 00:00:05

Code Stop Simulation Send To

1 (Arduino Uno R3)

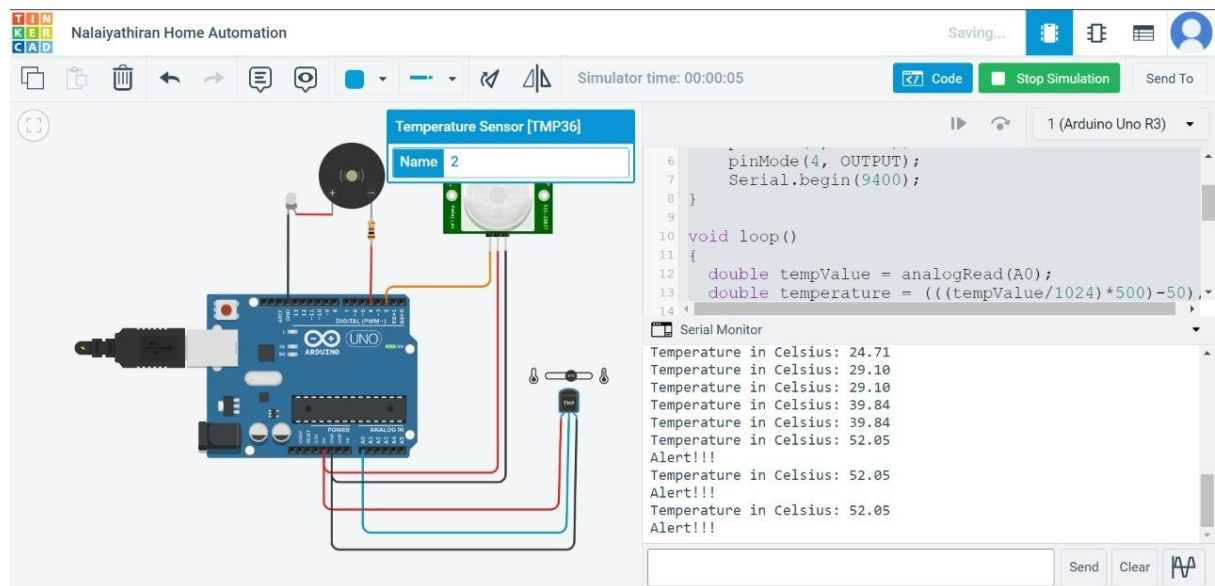
```
6 pinMode(4, OUTPUT);
7 Serial.begin(9400);
8 }
9
10 void loop()
11 {
12   double tempValue = analogRead(A0);
13   double temperature = (((tempValue/1024)*500)-50);
14 }
```

Serial Monitor

Temperature in Celsius: 24.71  
Temperature in Celsius: 29.10  
Temperature in Celsius: 29.10  
Temperature in Celsius: 39.84  
Temperature in Celsius: 39.84  
Temperature in Celsius: 52.05  
Alert!!!  
Temperature in Celsius: 52.05  
Alert!!!  
Temperature in Celsius: 52.05  
Alert!!!

Send Clear

Temperature Sensor [TMP36]  
Name 2



TIN  
K E F  
C A D

Nalaiyathiran Home Automation

Saving...

Simulator time: 00:00:16.882

Code Stop Simulation Send To

PIR Sensor

Name 1

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: 35.94  
Temperature in Celsius: 35.94  
Temperature in Celsius: 35.94  
Temperature in Celsius: 35.94  
Alert!!!  
Temperature in Celsius: 35.94  
Alert!!!  
Temperature in Celsius: 35.94  
Alert!!!  
Temperature in Celsius: 35.94  
Temperature in Celsius: 35.9