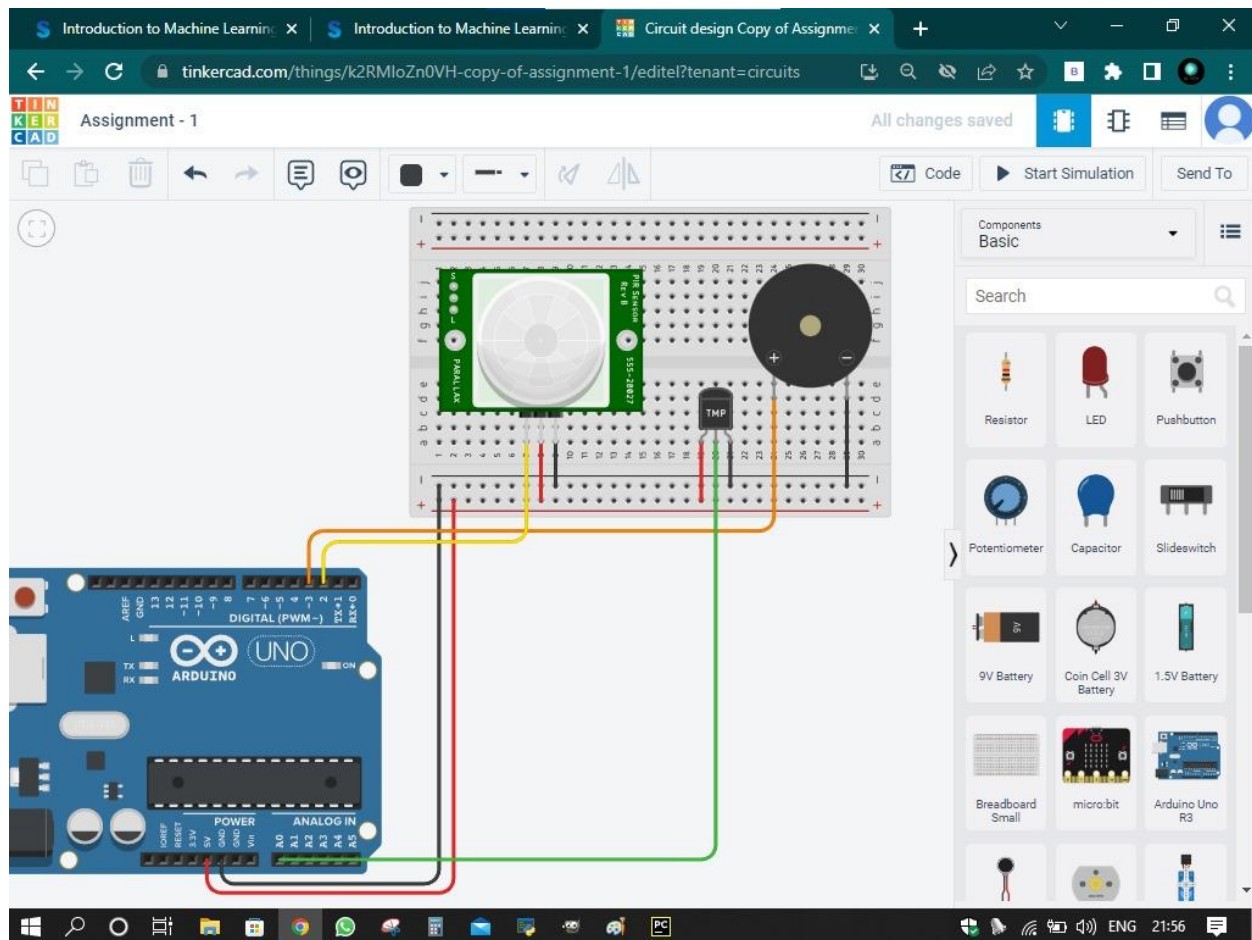
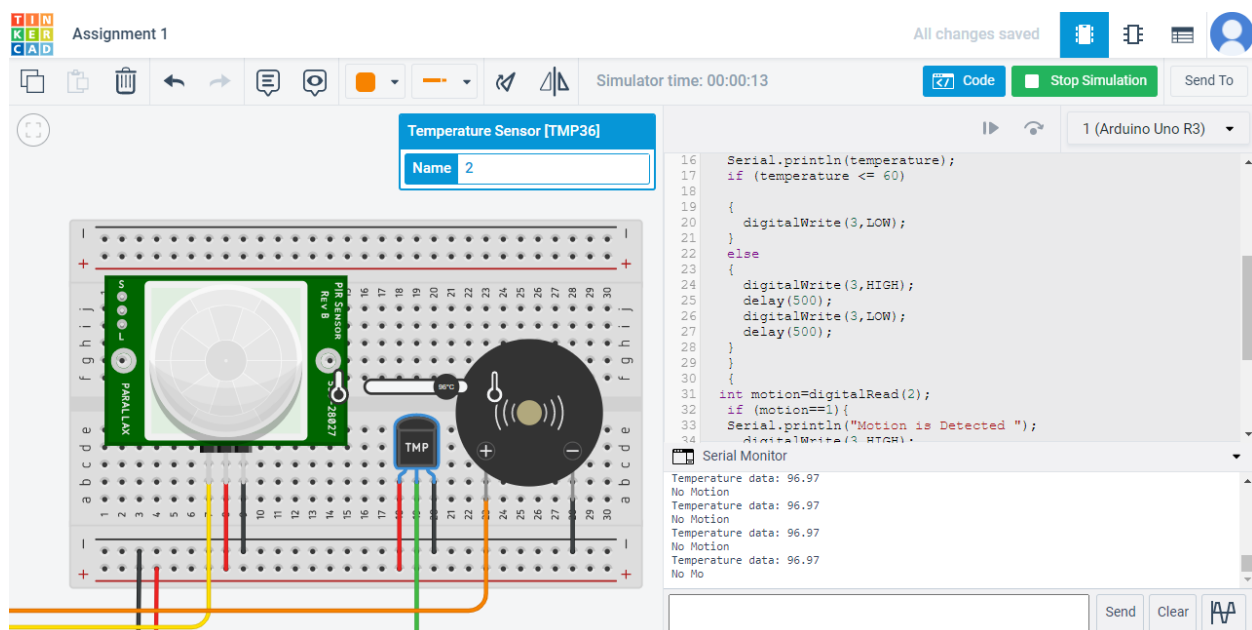


## CIRCUIT:



## CHANGING TEMPERATURE:



## CHANGING POSITION IN PIR SENSOR:

The screenshot shows the TINKER CADD simulation environment. At the top, it says "Assignment 1" and "All changes saved". The simulator time is "00:00:01". The interface includes a toolbar with icons for file operations, simulation control, and a "Code" button. The main workspace displays a breadboard with a PIR sensor module, a temperature sensor (TMP), and a speaker. A "PIR Sensor" configuration window is open, showing the following settings:

PIR Sensor	
Name	1
Target X	-9.46
Target Y	-186.09
Target Z	-231.13

The code editor on the right contains the following C++ code:

```
16 Serial.println(temperature);
17 if (temperature <= 60)
18 {
19   digitalWrite(3,LOW);
20 }
21 else
22 {
23   digitalWrite(3,HIGH);
24   delay(500);
25   digitalWrite(3,LOW);
26   delay(500);
27 }
28 }
29 {
30 }
31 int motion=digitalRead(2);
32 if (motion==1){
33   Serial.println("Motion is Detected ");
34 }
```

The Serial Monitor at the bottom shows the following output:

```
Temperature data: 24.71
No Motion
Temperature data: 24.71
No Motion
Temperature data: 24.71
No Motion
Temperature data: 24.71
Motion is Detected
```

## PROGRAM:

```
void setup()

{

  Serial.begin(9600);

  pinMode(3,OUTPUT);

  pinMode(2,INPUT);

}

void loop()

{

  {

    double data=analogRead(A0);

    double n=data/1024;

    double volt=n*5;

    double off=volt-0.5;
```

```
double temperature=off*100;

Serial.print("Temperature data: ");

Serial.println(temperature);

if (temperature <= 60)

{

    digitalWrite(3,LOW);

}

else

{

    digitalWrite(3,HIGH);

    delay(500);

    digitalWrite(3,LOW);

    delay(500);

}

}

{

int motion=digitalRead(2);

if (motion==1){

Serial.println("Motion is Detected ");

    digitalWrite(3,HIGH);

    delay(5000);

    digitalWrite(3,LOW);

    delay(500);

}
```

```
else{  
    Serial.println("No Motion");  
    digitalWrite(3,LOW);  
}  
  
}  
  
}
```