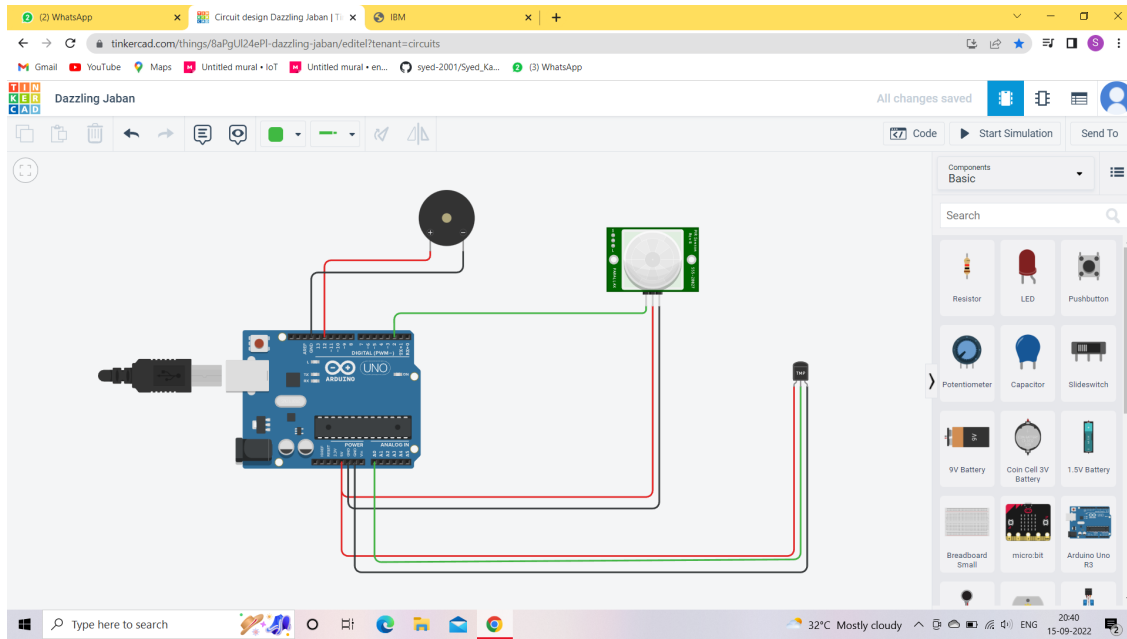


ASSIGNMENT-1

CIRCUIT DESIGN :



PROGRAM:

```
void setup()
{
  Serial.begin(9600);
  pinMode(12,OUTPUT);
  pinMode(2,INPUT);
}

void loop()
{
  int motion=digitalRead(2);
  double data=analogRead(A0);
  double n=data/1024;
  Serial.print("Converted Analog Data: ");
  Serial.println(n);
  double volt=n*5; //because connected to 5v
```

```
Serial.print("Voltage data: ");
Serial.println(volt);
double off=volt-0.5;
Serial.print("Offset Data: ");
Serial.println(off);
double temperature=off*100;
Serial.print("Temperature Data: ");
Serial.println(temperature);
if(motion==1 && temperature<60)
    tone(12,100);
else if(motion==0 && temperature>60)
    tone(12,400);
else if(motion==1 && temperature>60)
    noTone(12);
else if(motion==0 && temperature<60)
    noTone(12);

}
```

OUTPUT:

2 (2) WhatsApp x Circuit design Dazzling Jaban x IBM x +

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Dazzling Jaban

All changes saved

Simulator time: 00:00:02.745

Code Stop Simulation Send To

PIR Sensor

Name 1

```

1 // C++ code
2 //
3 void setup()
4 {
5   Serial.begin(9600);
6   pinMode(12,OUTPUT);
7   pinMode(2,INPUT);
8 }
9
10 void loop()
11 {
12   int motion=digitalRead(2);
13   double data=analogRead(A0);
14   double n=data/1024;
15   Serial.print("Converted Analog Data: ");
16   Serial.println(n);
17   double volt=n*5; //because connected to 5v
18   Serial.print("Voltage data: ");
19   Serial.println(volt);
20   double off=volt-0.5;
21   Serial.print("Offset Data: ");
22   Serial.println(off);
23 }

```

Serial Monitor

Offset Data: 0.25
Temperature Data: 24.71
Converted Analog Data: 0.15
Voltage data: 0.75
Offset Data: 0.25
Temperature Data: 24.71
Converted Analog Data: 0.15
Voltage

Send Clear

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2 (2) WhatsApp x Circuit design Dazzling Jaban x IBM x +

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Dazzling Jaban

All changes saved

Simulator time: 00:00:02.073

Code Stop Simulation Send To

Temperature Sensor [TMP36]

Name 2

```

1 // C++ code
2 //
3 void setup()
4 {
5   Serial.begin(9600);
6   pinMode(12,OUTPUT);
7   pinMode(2,INPUT);
8 }
9
10 void loop()
11 {
12   int motion=digitalRead(2);
13   double data=analogRead(A0);
14   double n=data/1024;
15   Serial.print("Converted Analog Data: ");
16   Serial.println(n);
17   double volt=n*5; //because connected to 5v
18   Serial.print("Voltage data: ");
19   Serial.println(volt);
20   double off=volt-0.5;
21   Serial.print("Offset Data: ");
22   Serial.println(off);
23 }

```

Serial Monitor

Offset Data: 0.73
Temperature Data: 73.05
Converted Analog Data: 0.25
Voltage data: 1.23
Offset Data: 0.73
Temperature Data: 73.05
Converted Analog Data: 0.25
Voltage dat

Send Clear

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Dazzling Jaban

All changes saved

Code Start Simulation Send To

Text 1 (Arduino Uno R3)

```
1 // C++ code
2 //
3 void setup()
4 {
5   Serial.begin(9600);
6   pinMode(12,OUTPUT);
7   pinMode(2,INPUT);
8 }
9
10 void loop()
11 {
12   int motion=digitalRead(2);
13   double data=analogRead(A0);
14   double n=data/1024;
15   Serial.print("Converted Analog Data: ");
16   Serial.println(n);
17   double volt=n*5; //because connected to 5v
18   Serial.print("Voltage data: ");
19   Serial.println(volt);
20   double off=volt-0.5;
21   Serial.print("Offset Data: ");
22   Serial.println(off);
23 }
```

Serial Monitor

Temperature Data: 0.78
Converted Analog Data: 0.10
Voltage data: 0.51
Offset Data: 0.01
Temperature Data: 0.78
Converted Analog Data: 0.10
Voltage data: 0.51
0

Type here to search

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