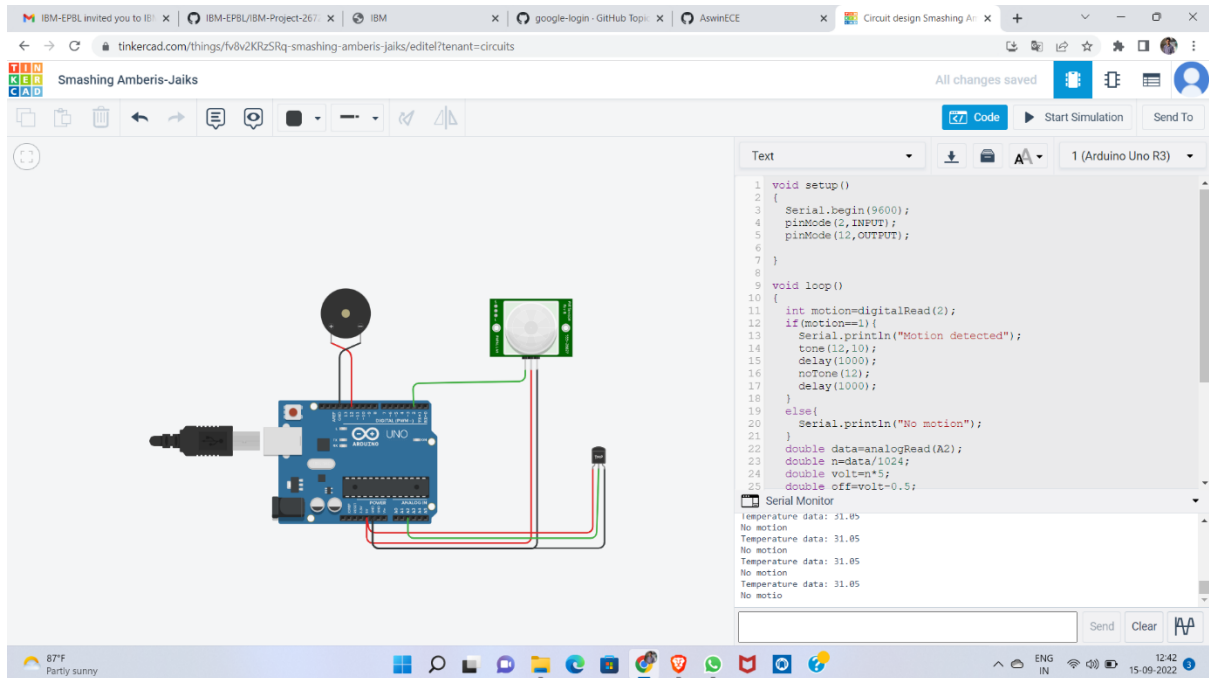


IBM ASSIGNMENT 1

Name: DHANUSH KUMAR V

College: Sona College of Technology

Circuit connections:



Output:

Smashing Amberis-Jaiks

Simulator time: 00:00:08

PIR Sensor
Name 1

```
1 void setup()
2 {
3   Serial.begin(9600);
4   pinMode(2, INPUT);
5   pinMode(12, OUTPUT);
6 }
7
8
9 void loop()
10 {
11   int motion=digitalRead(2);
12   if(motion==1){
13     Serial.println("Motion detected");
14     tone(12,10);
15     delay(1000);
16     noTone(12);
17     delay(1000);
18   }
19   else{
20     Serial.println("No motion");
21   }
22   double data=analogRead(A2);
23   double n=data/1024;
24   double volt=n*5;
25   double off=volt-0.5;
```

Serial Monitor

No motion
Temperature data: 24.71
No motion
Temperature data: 24.71
No motion
Temperature data: 24.71
No motion
Temperatu

Smashing Amberis-Jaiks

Simulator time: 00:00:13

Temperature Sensor [TMP36]
Name 2

```
1 void setup()
2 {
3   Serial.begin(9600);
4   pinMode(2, INPUT);
5   pinMode(12, OUTPUT);
6 }
7
8
9 void loop()
10 {
11   int motion=digitalRead(2);
12   if(motion==1){
13     Serial.println("Motion detected");
14     tone(12,10);
15     delay(1000);
16     noTone(12);
17     delay(1000);
18   }
19   else{
20     Serial.println("No motion");
21   }
22   double data=analogRead(A2);
23   double n=data/1024;
24   double volt=n*5;
25   double off=volt-0.5;
```

Serial Monitor

No motion
Temperature data: 24.71
No motion
Temperature data: 92.09
No motion
Temperature data: 92.09
No motion
Temperature data: 92.09

Code:

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

}

void loop()
{
  int motion=digitalRead(2);
  if(motion==1){
    Serial.println("Motion detected");
    tone(12,10);
    delay(1000);
    noTone(12);
    delay(1000);
  }
  else{
    Serial.println("No motion");
  }
  double data=analogRead(A2);
  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>60.00)
{
    tone(12,100);
    delay(500);
    noTone(12);
    delay(500);
}

}
```

Demo Link:

<https://drive.google.com/file/d/1Yn18E1mY77BunXnuZPpwdc2cjhwuZiEl/view?usp=drivesdk>