

IBM ASSIGNMENT-IOT

College Name : V.S.B Engineering College,Karur.

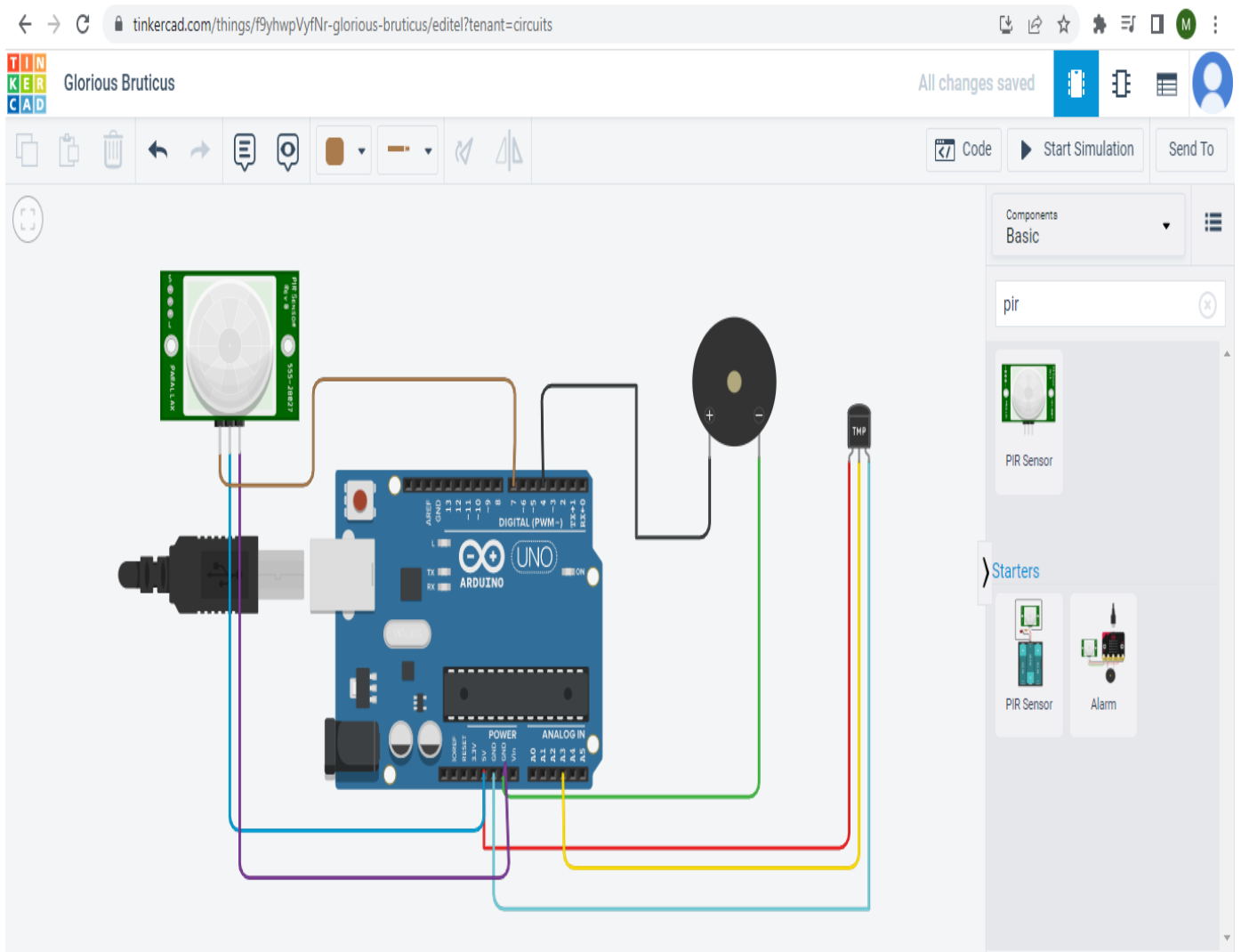
Department : Computer Science and Engineering

Name : R.Balamurugan

Topic:

Home Appliances Automation Using Arduino

Circuit:



Code:

```
void setup()
```

```
{
```

```
    Serial.begin(9600);
```

```
    pinMode(4,OUTPUT);
```

```
    pinMode(7,INPUT);
```

```
}
```

```
void loop()
{

    int mov=digitalRead(7);
    double dt=analogRead(A3);
    double n=dt/1024;
    double volt=n*5;
    double offset=volt-0.5;
    double temp=offset*100;
    Serial.print("Temperature Detected: ");
    Serial.println(temp);
    if(mov==0){
        Serial.println("No Motion Detected");
    }

    if(mov==1){
        Serial.println("Motion Detected");
        tone(4,100,1000);
    }
    if(temp>60){
        tone(4,400,1000);
    }
}
```

Output:

tinkercad.com/things/f9yhwpyfNr-glorious-bruticus/editel?tenant=circuits

TINKERCAD Glorious Bruticus All changes saved

Code Start Simulation Send To

PIR Sensor
Name 1

1 (Arduino Uno R3)

```
15 double volt=n*5;  
16 double offset=volt-0.5;  
17 double temp=offset*100;  
18 Serial.print("Temperature Detected: ");  
19 Serial.println(temp);  
20 if(mov==0){
```

Serial Monitor

No Motion Detected
Temperature Detected: 96.00
No Motion Detected
Temperature Detected: 96.00
No Motion Detected
Temperature Detected: 96.00
No Motion Detected
Temperature Detected: 96.00
No Motion Detected
Temperature Detected: 96.00
Motion Detected
Temperature Detected: 96.00
Motion Detected
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Temperature Detected: 96.00
Motion Detected
Temperature Detected: 96.00
Motion Detected

Send Clear