IBM ASSIGNMENT-IOT

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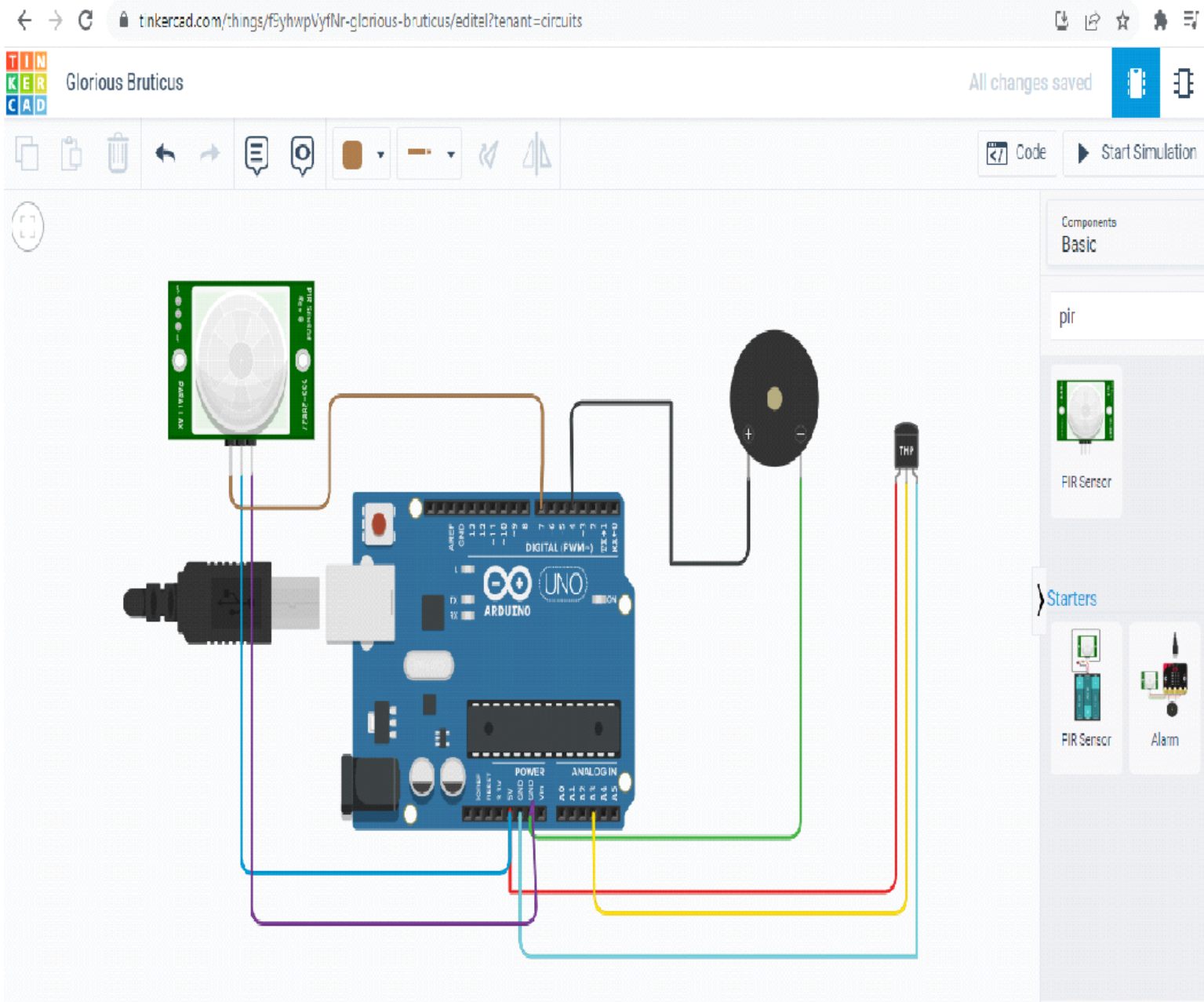Degree   :B.E

Branch   :ECE

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

Topic:

To design a circuit using PIR sensor, Temperature sensor and Piezo alarm and to perform the following operations:

- Alarm should sound in one manner if the temperature is above "60 C".
- Alarm should sound with another frequency if motion is detected using PIR sensor.
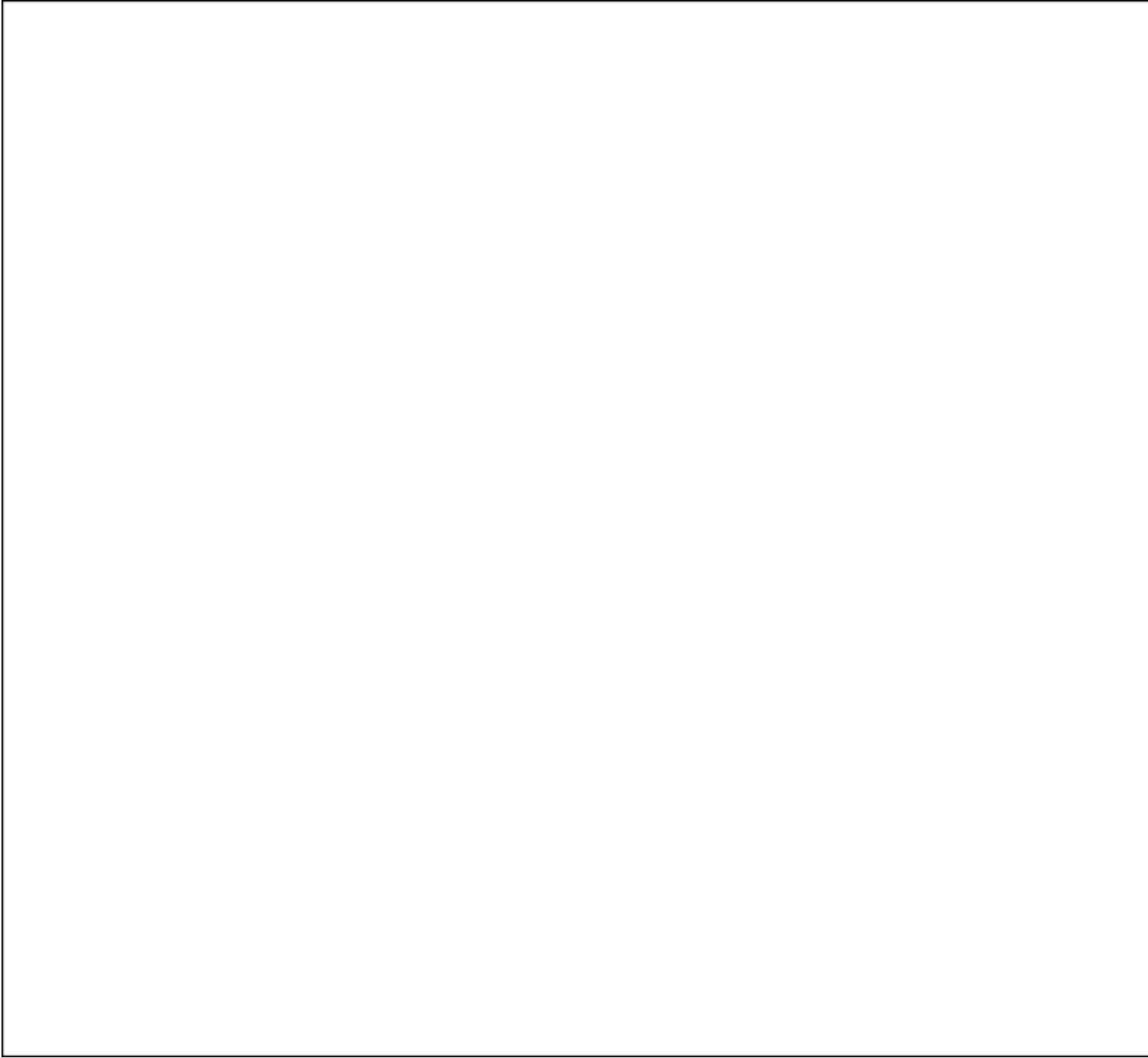
Circuit:

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);
  }
}
```

Glorious Bruticus

All changes saved

PIR Sensor

Name | 1

Text ▼

1 (Arduino Ur

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

Send