

IBM ASSIGNMENT-IOT

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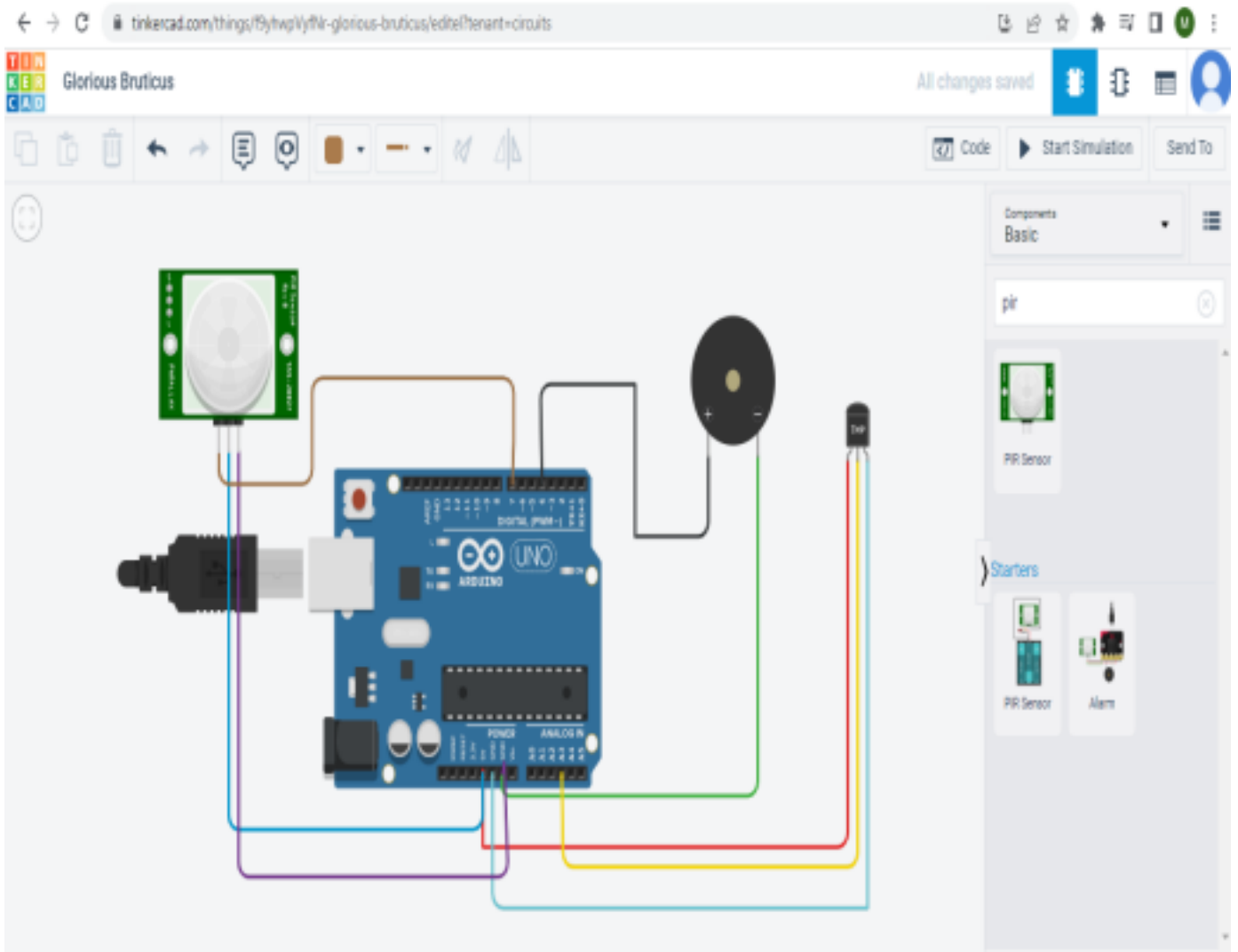
Degree :B.E
Branch :Computer Science and Engineering
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Topic:

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

1. Alarm should sound in one manner if the temperature is above “60 C”.
2. 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 a=dt/1024;
```

```
double volt=a*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:

