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ASSIGNMENT – 1

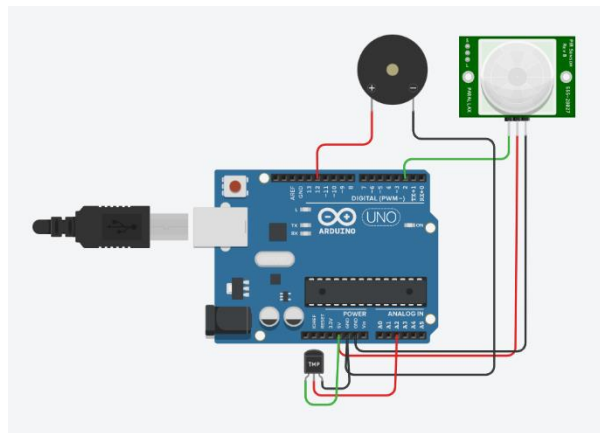
QUESTION:

Please create circuit Piezo alarm, PIR sensor, temperature sensor with below functionalities:

1. Alarm should sound in one manner if temp is above 60 C
2. Alarm should sound with another frequency if motion is detected in PIR sensor.

SOLUTION:

CIRCUIT CONNECTION:



PROGRAM:

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

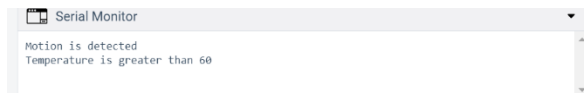
void loop(){
  int motion=digitalRead(2);
  double data=analogRead(A2);
  double n=data/1024;
```

```
double volt=n*5;
double off=volt-0.5;
double temp=off*100;

if(temp>60){
    Serial.println("Temperature is greater than 60");
    tone(12,200);
    delay(2000);
}

if(motion == 1){
    Serial.println("Motion is detected");
    tone(12,100);
    delay(2000);
}
}
```

OUTPUT:



TINKERCAD LINK:

<https://www.tinkercad.com/things/1s5Y1OTHx1x?sharecode=2nvJ2G2LHjHkkaTBmZliHAmZR Xm5RKIyO8ae9Ise1fo>