

Assignment

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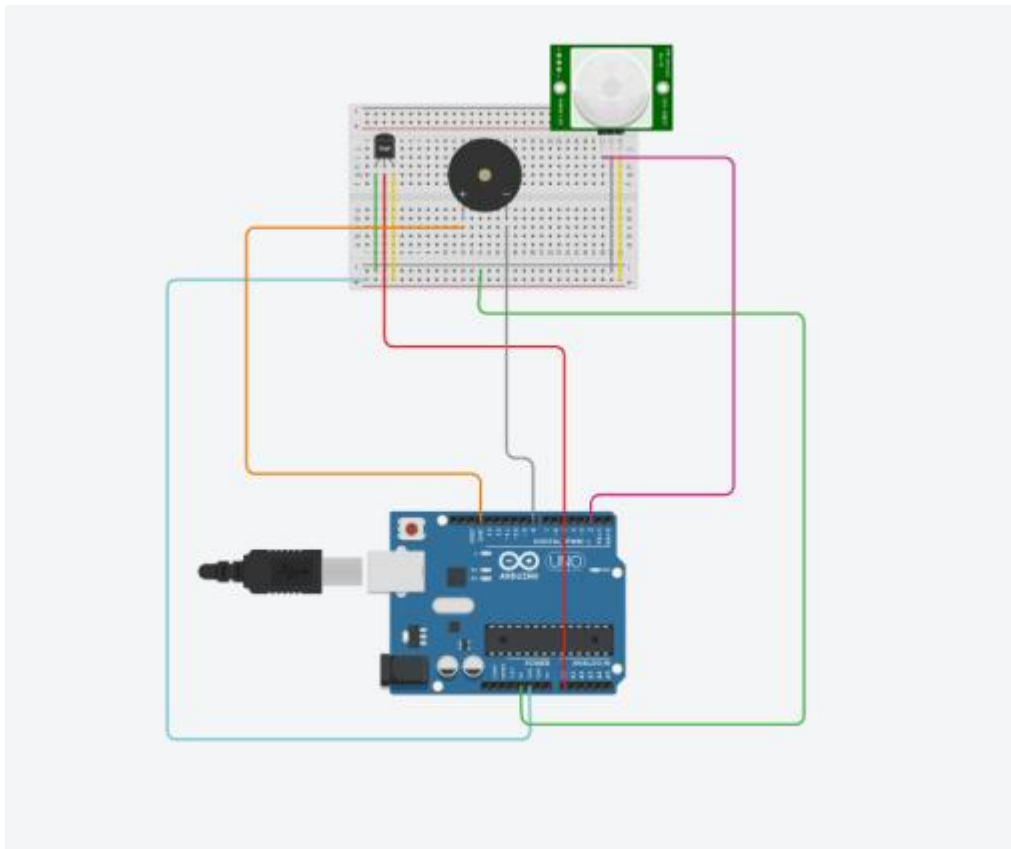
Team ID ; PNT2022TMID53688

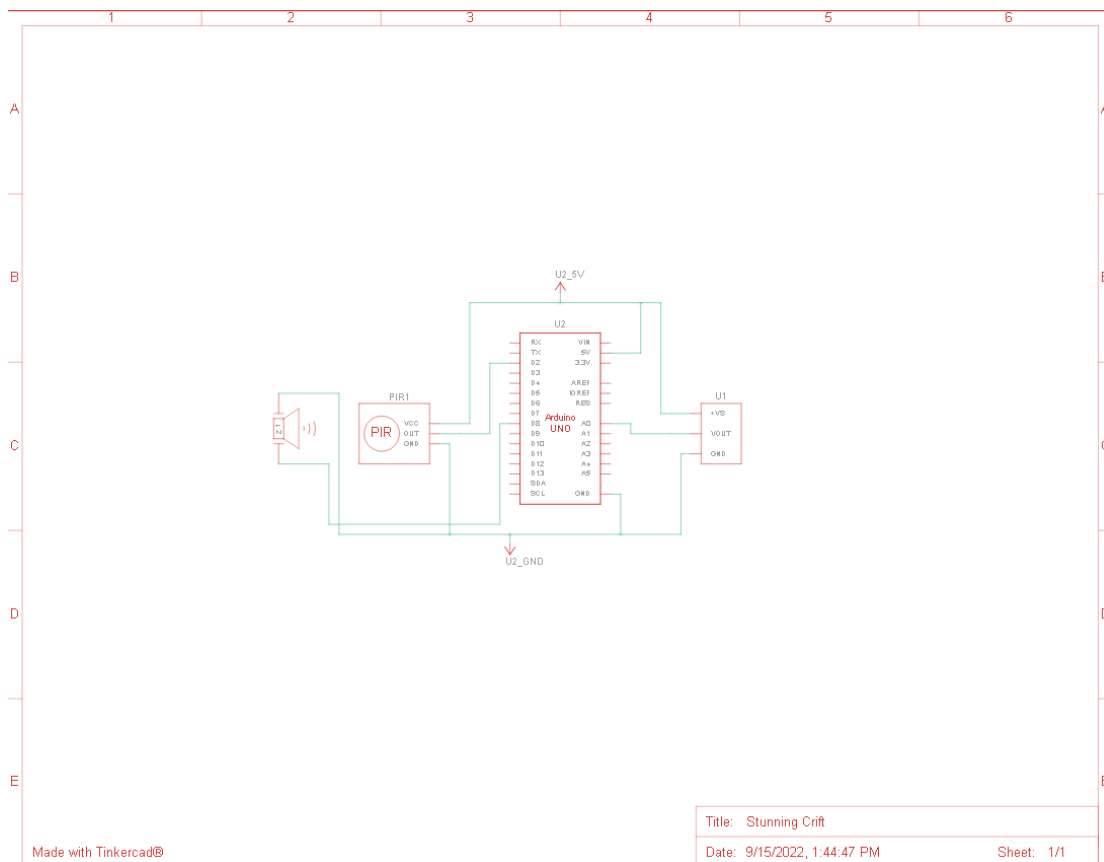
Question :

1.Design a circuit with piezo alarm, PIR sensor, temperature sensor with below functionalities:

Alarm should sound in one manner if temp is above 60 C.

Alarm should sound with familiar if motion is detected in PIR sensor.





Code :

```
int temppin=A0;

float temp=0;

int piezoPin= 8;

float PIR=2;

void setup() {

  Serial.begin(9600);

  pinMode(temppin,INPUT);

  pinMode(PIR,INPUT);

  pinMode(piezoPin,OUTPUT);

}
```

```

void loop() {
  if(digitalRead(PIR)==HIGH){
    digitalWrite(piezoPin,HIGH);
    tone(piezoPin,1000);
    Serial.println("Movement Detected");
  }
  else
  {
    if(digitalRead(PIR)==LOW){
      digitalWrite(piezoPin,LOW);
      noTone(piezoPin);
      Serial.println("No Movement Detected");
    }
  }

  double data=analogRead(temppin);
  double n=data/1024;
  double temp=((n*5)-0.5)*100;
  Serial.print("Temperature: ");
  Serial.println(temp);
  if (temp >60) {
    digitalWrite(piezoPin,HIGH);
    tone(piezoPin,500);
    Serial.println(" Temperature High");
  }
}

```