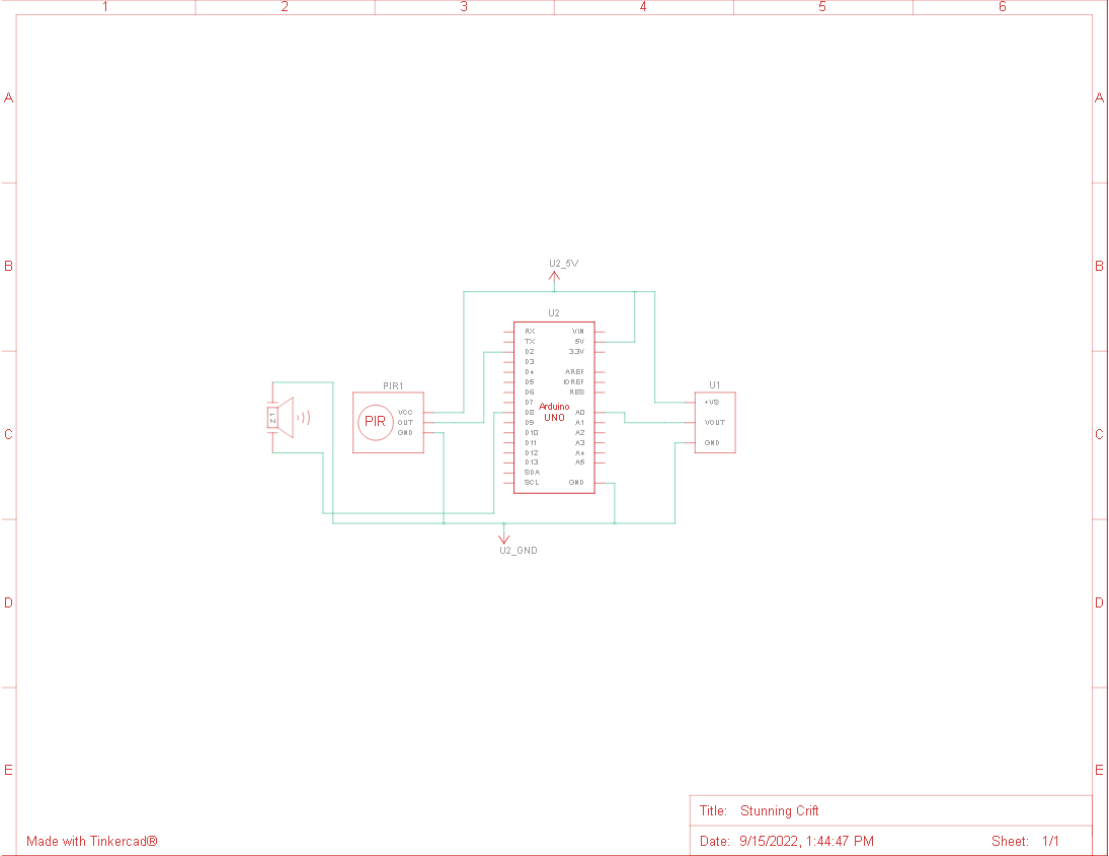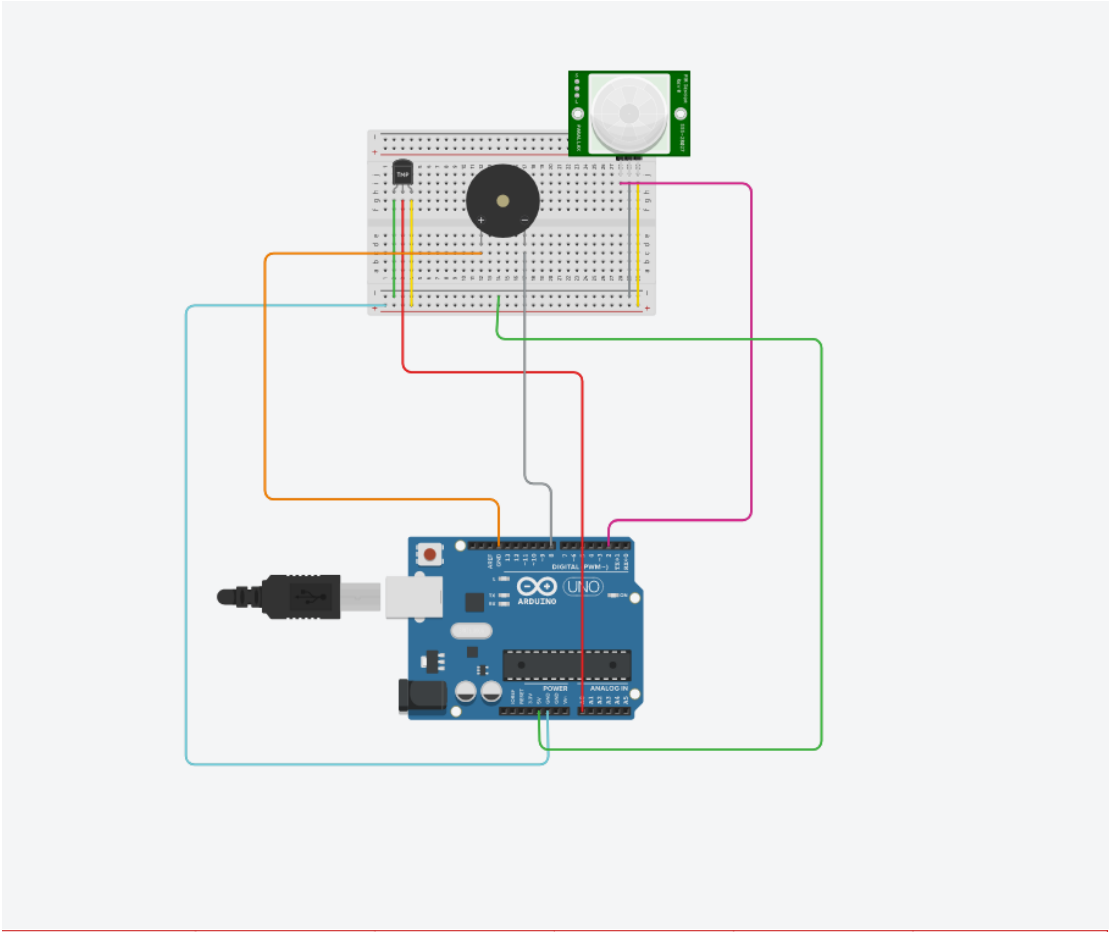Assignment-1

Student Name: Biplab Das S
Roll No.: 714019106015

Question:
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 another frequency if motion is detected in PIR sensor.

Title: Stunning Crift

Date: 9/15/2022, 1:44:47 PM

Sheet: 1/1

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");
}
}
```