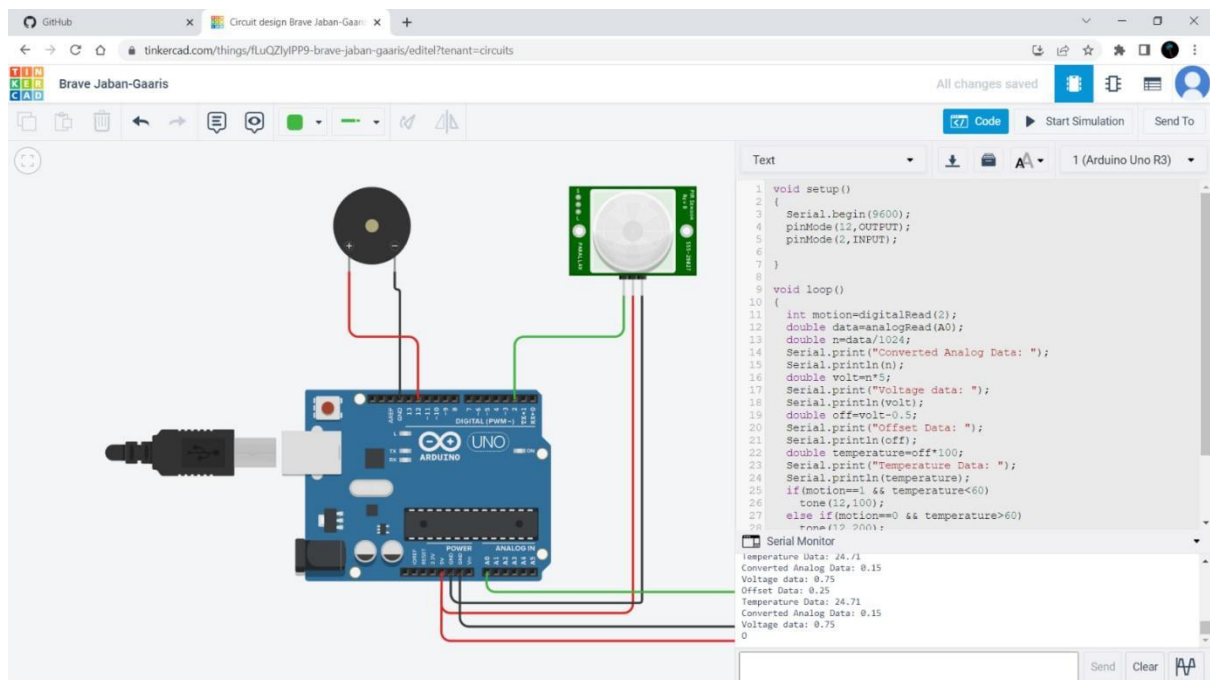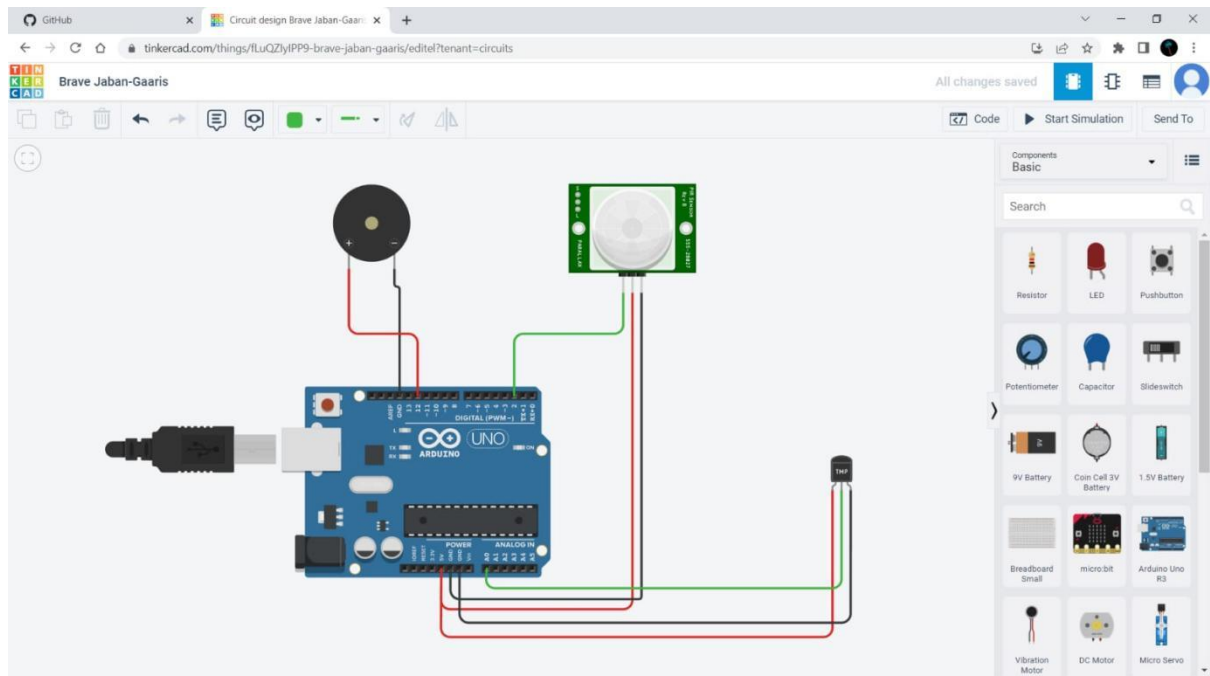# Circuit with Piezo alarm, PIR sensor, temp sensor with below functionalities:

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.

Code:

```
void setup()
{
  Serial.begin(9600);
  pinMode(12,OUTPUT);
  pinMode(2,INPUT);

}

void loop()
{
  int motion=digitalRead(2);
  double data=analogRead(A0);
  double n=data/1024;
  Serial.print("Converted Analog Signal: ");
  Serial.println(n);
  double volt=n*5;
  Serial.print("Voltage data: ");
  Serial.println(volt);
  double off=volt-0.5;
  Serial.print("Offset Data: ");
  Serial.println(off);
  double temperature=off*100;
  Serial.print("Temperature Data: ");
  Serial.println(temperature);
  if(motion==1 && temperature<60)
    tone(12,100);
  else if(motion==0 && temperature>60)
```

```
    tone(12,200);
  else if(motion==1 && temperature>60)
    noTone(12);
  else if(motion==0 && temperature<60)
     noTone(12);


}
```

Video file:

Circuit
design(1).mp4