ASSIGNMENT 1

ASSIGNMENT DATE	15-SEP-2022
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MAXIMUM MARK	2MARK

QUESTION:

*) Using PIR sensor and tmp36(Temperature sensor),piezo alarm. Create a circuit with Arduino Uno with below functionalities

1)Alarm should give one sound when there is a motion near PIR sensor.

2)Alarm should sound with different sound when the temperature is above 60 degress.

Solution:

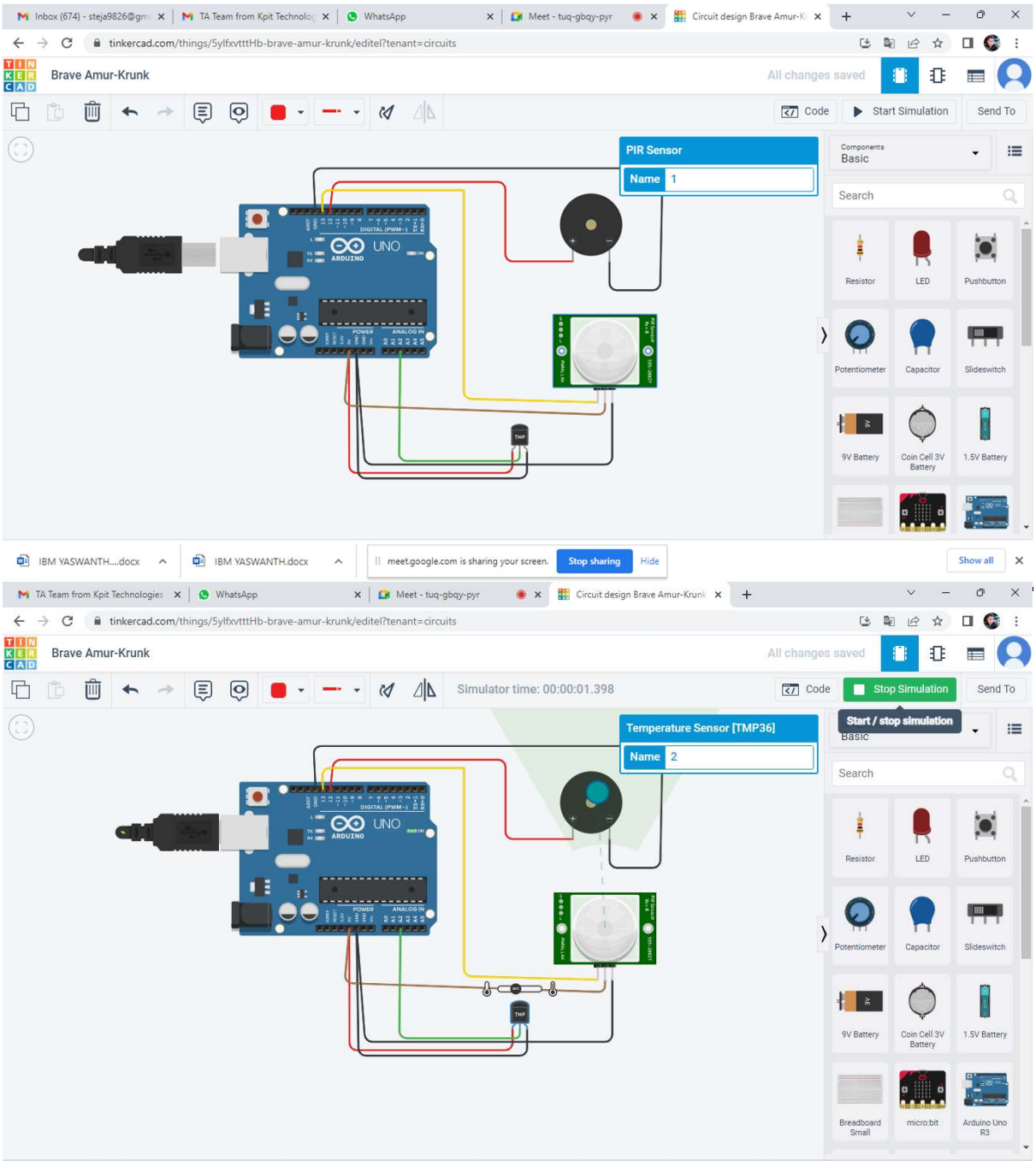
CODE:

```
void setup()
{
 Serial.begin(9600);
  pinMode(13,INPUT);
  pinMode(12,OUTPUT);
}

void loop()
{
  double data=analogRead(A2);
  double n=data/1024;
  double volt=n*5;
  double off=volt-0.5;
  double temperature=off*100;
  int motion=digitalRead(13);
  for(int freq=4;freq<=5;freq++)
  {
    if(temperature>=60)
```

```
    {
     Serial.println("Temperature is above 60");
     tone(12,freq);
     delay(100);
    }
    else
    {
     Serial.println("Temperature is below 60");
     noTone(12);
    }
  }
    for(int freq=2;freq<=3;freq++)
    {
    if(motion==1)
  {
     Serial.println("Motion Detected");
    tone(12,freq);
     delay(200);
  }
  else
  {
   Serial.println(" No Motion");
   noTone(12);
  }
  }
}
```

Circuit:



COMPONENTS

Quantity	Component
1	Arduino Uno R3
Few	Connecting Wires
1	Buzzer
1	Temperature Sensor [TMP36]
1	Ultrasonic Distance Sensor

Video Link:

https://drive.google.com/file/d/1hTW_3mGJBnQZek3Gg1ru9PjLaQLBYUJ1/view?usp=sharing