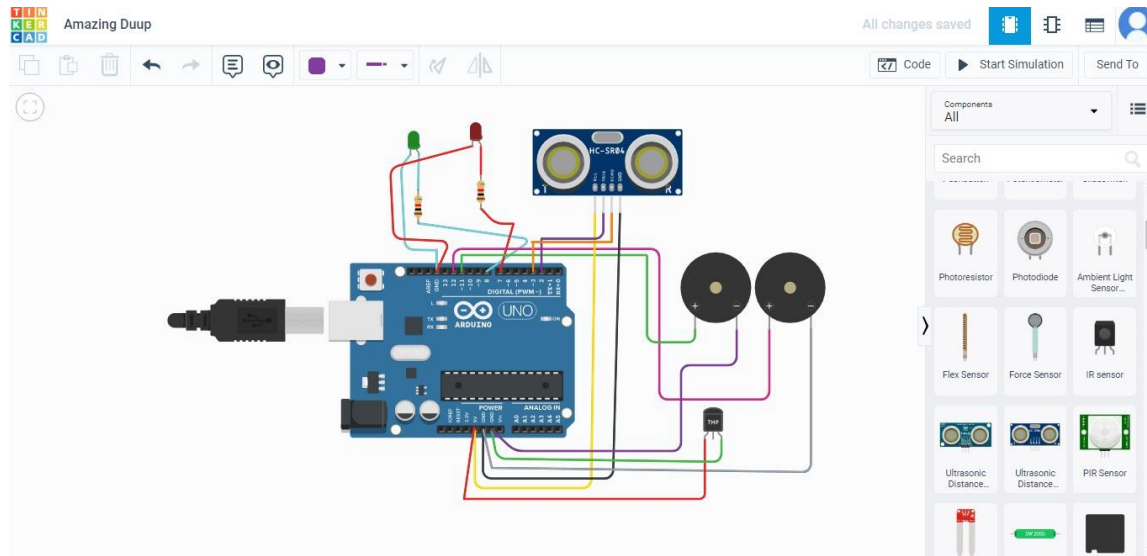# ASSIGNMENT 1

NAME : RAGHUL P

IMAGE:

CODE FOR SIMULATION:

```
int t=2;

int e=3;

void setup()

{

   Serial.begin(9600);

   pinMode(t,OUTPUT);

   pinMode(e,INPUT);

   pinMode(12,OUTPUT);

}

void loop()
```

```
{
                        //FOR ULTRASONIC SENSOR//

    digitalWrite(t,LOW);

    digitalWrite(t,HIGH);

    delayMicroseconds(10);

    digitalWrite(t,LOW);

    float dur=pulseIn(e,HIGH);

    float dis=(dur*0.0343)/2;

    Serial.print("Distance is: ");

    Serial.println(dis);
                        //FOR LED ON//

    if(dis>=100)

    {

        digitalWrite(87,HIGH);

        digitalWrite(7,HIGH);

    }
                        //FOR BUZZER - ULTRASONIC SENSOR//

    if(dis>=100)

    {

        for(int i=0;i<=30000;i=i+10)

        {

            tone(12,i);

            delay(1000);

            noTone(12);

            delay(1000);
```

```arduino
    }
}
                         //FOR TEMPERATE SENSOR//
    double a = analogRead(A0);
    double t=(((a/1024)*5)-0.5)*100;
    Serial.print("Temp Value: ");
    Serial.println(t);
    delay(1000);
                         //FOR LED ON//
  if(t>=100)
  {
    digitalWrite(8,HIGH);
    digitalWrite(7,HIGH);
  }
                         //FOR BUZZER - TEMPERATE SENSOR//
  if(if t>=100)
  {
    for(int i=0;i<=30000;i=i+10)
    {
      tone(12,i);
      delay(1000);
      noTone(112);
      delay(1000);
    }
  }
```

```
        //FOR LED OFF//

    if(t<100)

    {

       digitalWrite(8,LOW);

       digitalWrite(7,LOW);

    }

}
```