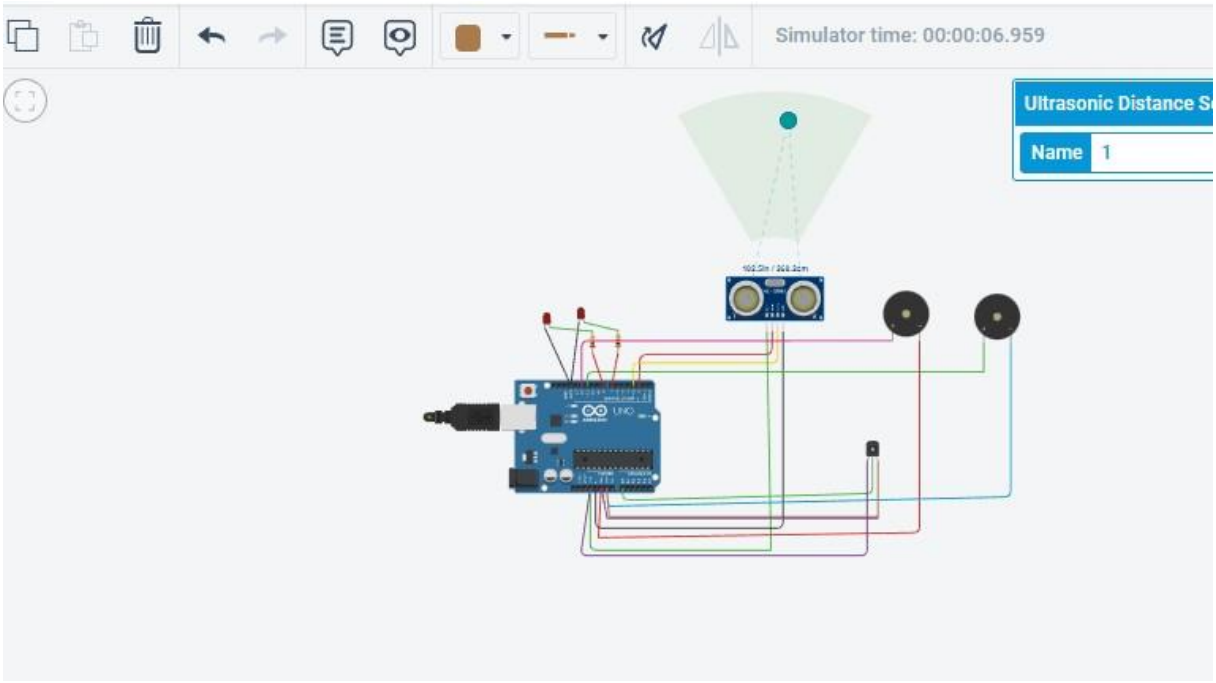
Assignment -1

Tinker Cad

Assignment Date	19 September 2022
Student Name	DIVYA S
Student Roll Number	713519CEEC008
Maximum Marks	2 Marks

Question-1:

Smart Home Automation



Code:

```
int
t=2;
        int e=3;


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

```
}


void loop()
{
  //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);

    //LED ON
  if(dis>=100)
  {
    digitalWrite(8,HIGH);
    digitalWrite(7,HIGH);
  }

  //Buzzer For ultrasonic Sensor
  if(dis>=100)
  {
  for(int i=0; i<=30000; i=i+10)
  {
  tone(12,i);
  delay(1000);
  noTone(12);
  delay(1000);
  }
  }




    //Temperate Sensor
  double a= analogRead(A0);
  double t=(((a/1024)*5)-0.5)*100;
  Serial.print("Temp Value: ");
  Serial.println(t);
  delay(1000);


  //LED ON
```

```
  if(t>=100)
  {
    digitalWrite(8,HIGH);
    digitalWrite(7,HIGH);
  }

  //Buzzer for Temperature Sensor
  if(t>=100)
  {
  for(int i=0; i<=30000; i=i+10)
  {
  tone(12,i);
  delay(1000);
  noTone(12);
  delay(1000);
  }
  }


   //LED OFF
  if(t<100)
  {
    digitalWrite(8,LOW);
    digitalWrite(7,LOW);
  }
}
```