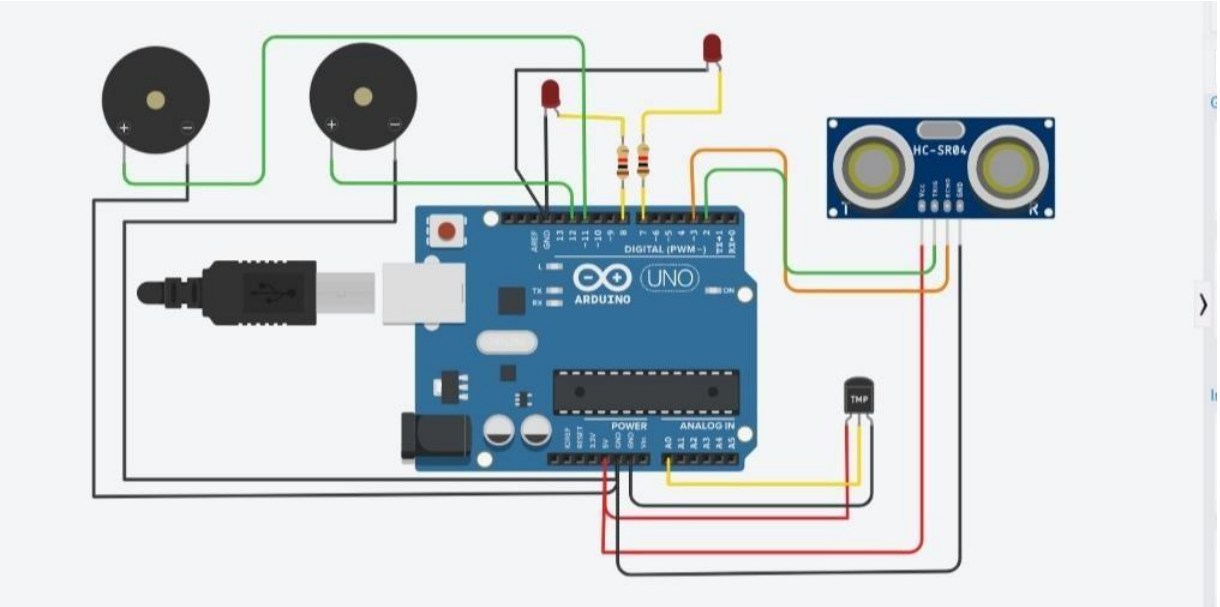
Assignment Date	21 September 2022
Student Name	C. Nivetha
Student Roll Number	960219104073
Maximum Marks	2 Marks

CIRCUIT DIAGRAM:



SOURCE CODE:

```
// C++ code
//
int trig=2; int
echo=3;


void setup()
```

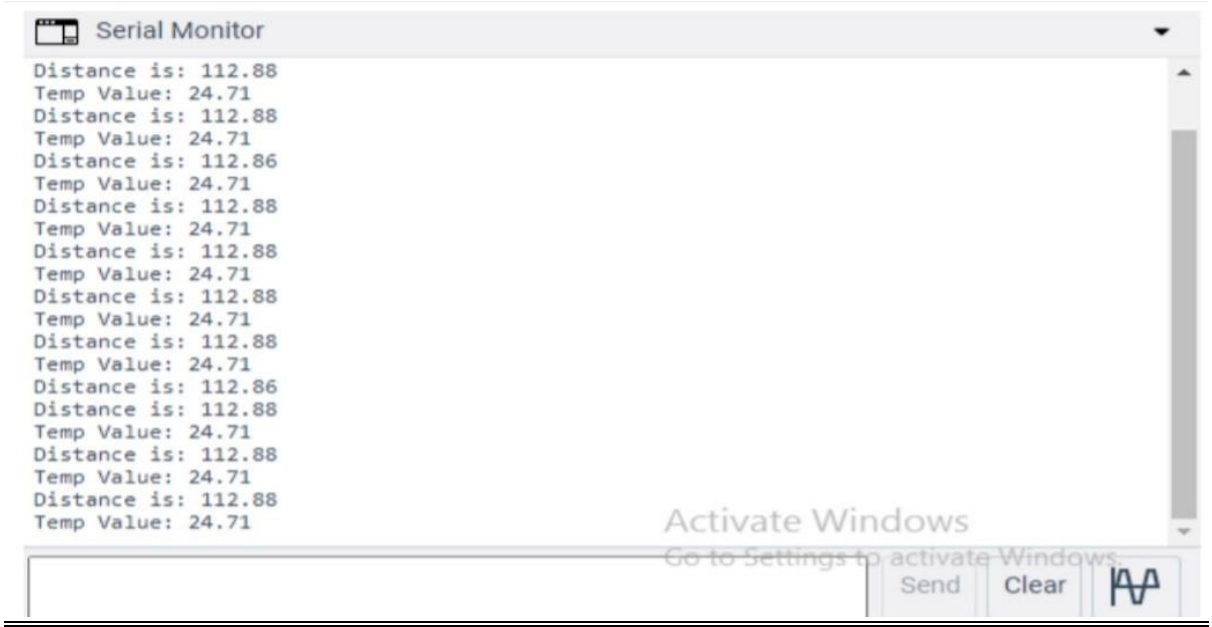
```
{
  Serial.begin(9600);
pinMode(trig,OUTPUT);
pinMode(echo,INPUT);
pinMode(12,OUTPUT);
}

void loop() {
  //ultrasonic sensor
digitalWrite(trig,LOW);
digitalWrite(trig,HIGH);
delayMicroseconds(10);
digitalWrite(trig,LOW); float
dur=pulseIn(echo,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);
```

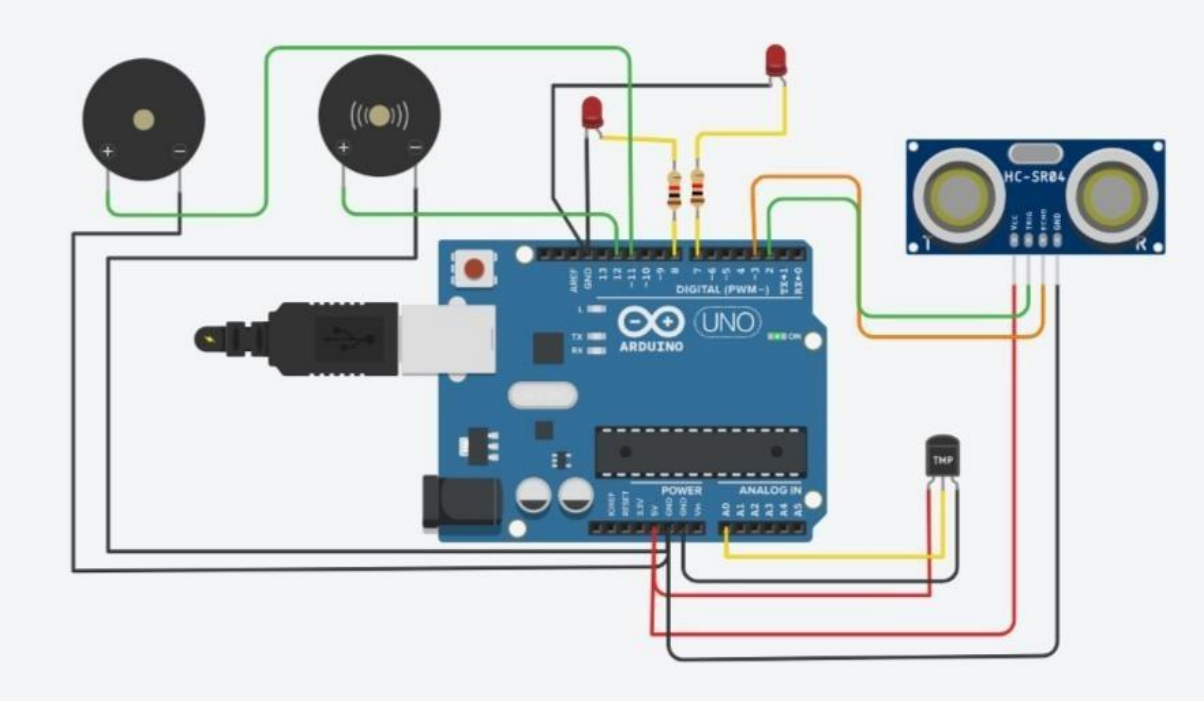
```
  }

  //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
trig=(((a/1024)*5)-0.5)*100;
  Serial.print("Temp Value: ");
Serial.println(trig);
delay(1000);
```

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

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

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

OUTPUT:




HC-SR04
DIGITAL (PWM~)
UNO
ARDUINO
POWER
ANALOG IN
TMP