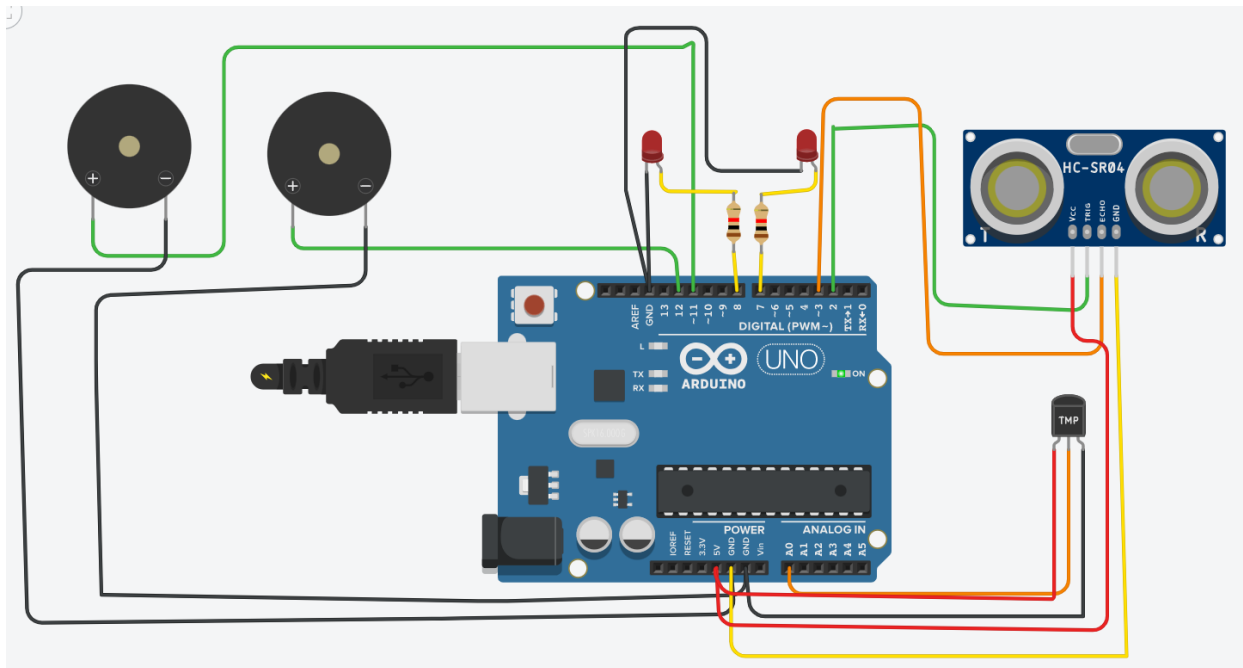


ASSIGNMENT-1

SMART HOME

Assignment Date	21 September 2022
Student Name	S.Shajitha
Student Roll Number	960219104092
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:

