

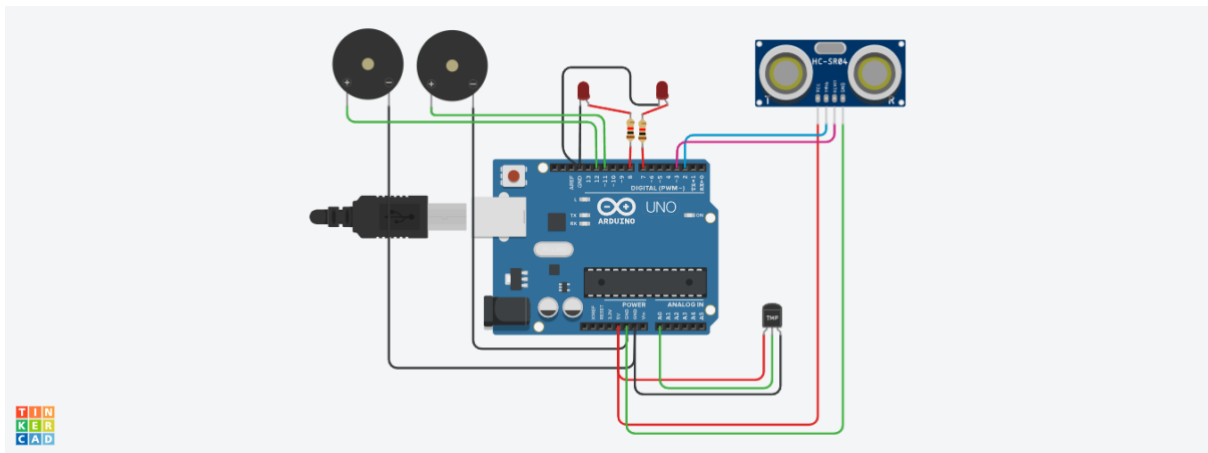
Assignment -1

Assignment Date	18 September 2022
Student Name	Jayakumar M
Student Roll Number	611219106031
Maximum Marks	2 Marks

Question:

Build a circuit using 3 sensors.

Circuit diagram:



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);  
}  
}
```