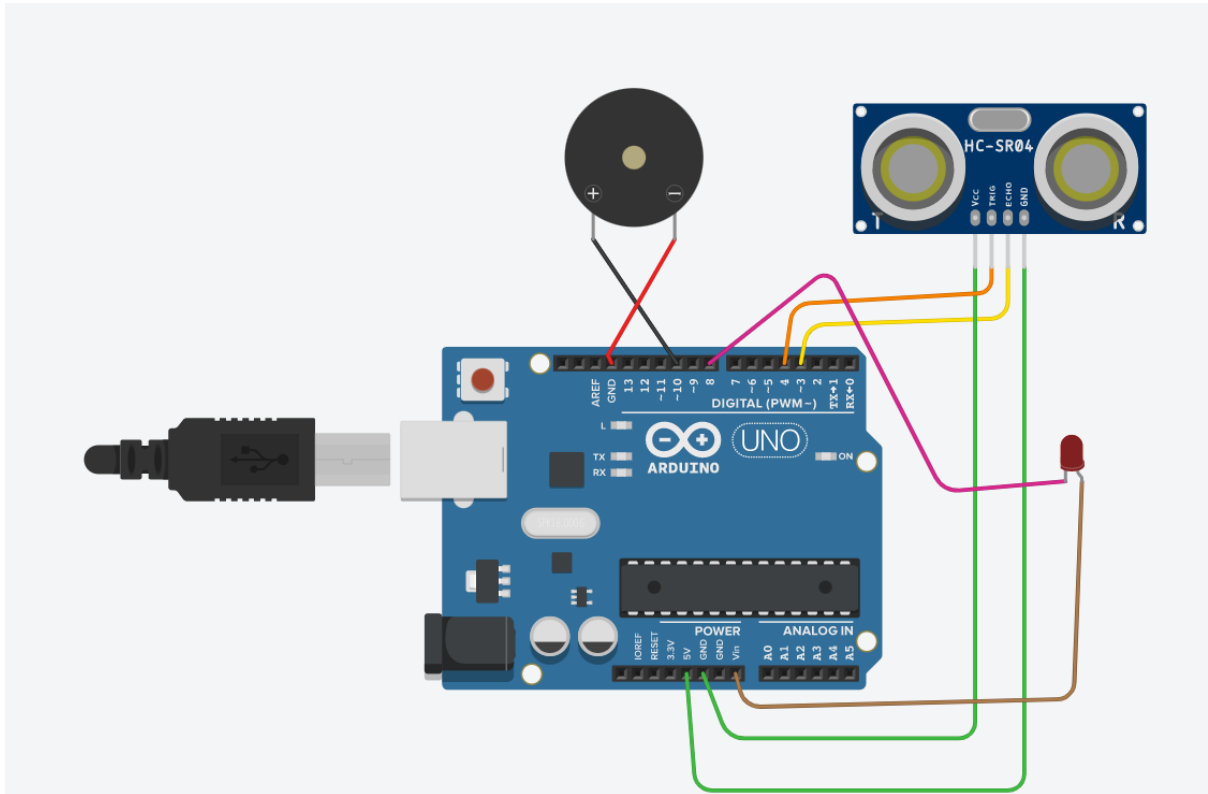


Assignment 1

Circuit:



Code:

```
int trigpin=4;
int echopin=3;
int buzzerpin=10;
int time;
int distance;

void setup()
{
  pinMode(8,OUTPUT);
  pinMode(3,INPUT);
  pinMode(4,OUTPUT);
  pinMode(10,OUTPUT);
  Serial.begin(9600);
```

```
}
```

```
void loop()
```

```
{
```

```
  digitalWrite(trigpin,HIGH);
```

```
  delayMicroseconds(1000);
```

```
  digitalWrite(trigpin,LOW);
```

```
  delayMicroseconds(1000);
```

```
  time=pulseIn(echopin,HIGH);
```

```
  distance=(time*0.034)/2;
```

```
  if(distance<=10)
```

```
  {
```

```
    Serial.print("Distance=");
```

```
    Serial.println(distance);
```

```
    digitalWrite(8,HIGH);
```

```
    delay(1000);
```

```
    digitalWrite(10,LOW);
```

```
    delay(1000);
```

```
  }
```

```
  else
```

```
  {
```

```
    Serial.print("Distance=");
```

```
    Serial.println(distance);
```

```
    digitalWrite(8,LOW);
```

```
    delay(1000);
```

```
    digitalWrite(10,HIGH);
```

```
    delay(1000);
```

```
  }
```

```
}
```

Circuit design Exquisite Lappi | TinkerCAD

https://www.tinkercad.com/things/IqAaZgmoXB-exquisite-lappi/edit?tenant=circuits

Exquisite Lappi

All changes saved

Code Start Simulation Send To

Text 1 (Arduino Uno R3)

```
1 int trigpin=4;
2 int echopin=3;
3 int buzzerpin=10;
4 int time;
5 int distance;
6
7 void setup()
8 {
9   pinMode(8,OUTPUT);
10  pinMode(3,INPUT);
11  pinMode(4,OUTPUT);
12  pinMode(10,OUTPUT);
13  Serial.begin(9600);
14 }
15
16 void loop()
17 {
18   digitalWrite(trigpin,HIGH);
19   delayMicroseconds(1000);
20   digitalWrite(trigpin,LOW);
21   delayMicroseconds(1000);
22   time=pulseIn(echopin,HIGH);
23   distance=(time*0.034)/2;
24   if(distance<=10)
25   {
26     Serial.print("Distance=");
27     Serial.println(distance);
28     digitalWrite(8,HIGH);
29     delay(1000);
30     digitalWrite(10,LOW);
31     delay(1000);
32   }
33   else
34   {
35     Serial.print("Distance=");
36     Serial.println(distance);
```

Serial Monitor