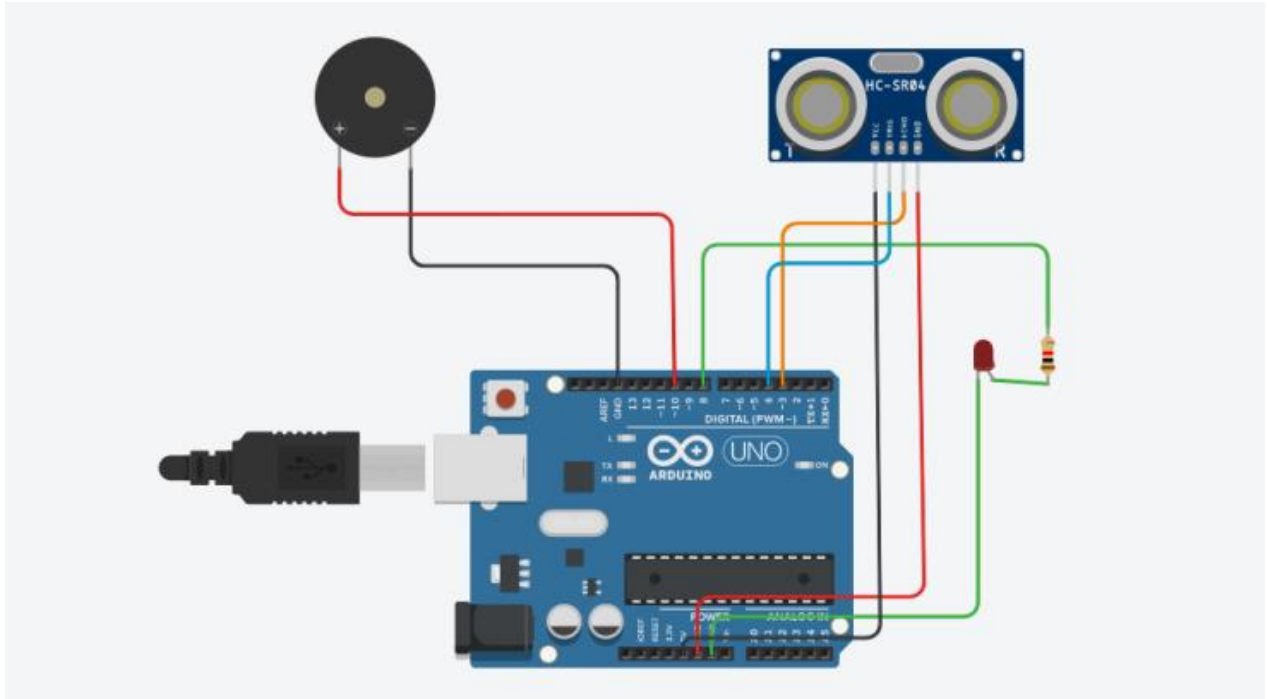


## Circuit Design



## Program:

```
int t=4;
int e=3;
int b=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(t, HIGH);
    delayMicroseconds(10);
    digitalWrite(t, LOW);
    delayMicroseconds(10);
    time=pulseIn(e,HIGH);
    distance=(time*0.034)/2;
    if(distance<=100)
    {
        Serial.print("Distance= ");
        Serial.println(distance);
        digitalWrite(8,HIGH);
        delay(10);
        digitalWrite(10,LOW);
        delay(10);
    }
    else
    {
        Serial.print("Distance= ");
        Serial.println(distance);
        digitalWrite(8,LOW);
        delay(10);
        digitalWrite(10,HIGH);
        delay(10);
    }
}
```

# Output:

TINKER CADD Incredible Robo-Inari

Saved

Simulator time: 00:00:03.673

Code Stop Simulation Send To

1 (Arduino Uno R3)

Select device

How the debugger works

1. Add breakpoints by clicking on the line numbers.
2. Hover over the variables while paused to see their value.
3. Use the buttons above to resume simulation or step one line at a time.

```
1 int t=4;
2 int e=3;
3 int b=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(t, HIGH);
19   delayMicroseconds(10);
20   digitalWrite(t, LOW);
21   delayMicroseconds(10);
22 }
```

Serial Monitor

Distance= 112  
Distance= 112  
Distance= 112  
Distance= 111  
Distance= 112  
Distance= 112  
Distance= 112  
Distance= 112  
Distance= 11

