

Circuit design Neat Densor-Hango

New Tab

tinkercad.com/things/7kEbDHTdgLC-neat-densor-hango/editel?tenant=circuits

Neat Densor-Hango

All changes saved

Simulator time: 00:01:39

Code

Stop Simulation

Send To

Ultrasonic Distance Sensor

Name 1

```
1 int trigger_pin=2;
2 int echo_pin=3;
3 int buzzer_pin=10;
4 int time;
5 int distance;
6 void setup() {
7   Serial.begin(9600);
8   pinMode(trigger_pin, OUTPUT);
9   pinMode(echo_pin, INPUT);
10  pinMode(buzzer_pin, OUTPUT);
11 }
12 void loop()
13 {
14   digitalWrite(trigger_pin, HIGH);
15   delayMicroseconds(10);
16   digitalWrite(trigger_pin, LOW);
17   time=pulseIn(echo_pin, HIGH);
18   distance=(time*0.034)/2;
19   if(distance<=10){
20     digitalWrite(buzzer_pin, HIGH);
21     delay(100);
22     digitalWrite(buzzer_pin, LOW);
23   }
24   Serial.print("Door Closed\n");
25   Serial.print("Distance=");
26   Serial.print(distance);
27   Serial.print("\n");
28 }
```

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.

Serial Monitor

Door Closed
Distance=117
Door Closed
Distance=117
Door Closed
Distance=117
Door Closed
Distance=117

Send Clear

12:26

14-09-2022

Circuit design Neat Densor- | x

New Tab x +

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Neat Densor-Hango

All changes saved

Simulator time: 00:02:09

Code

Stop Simulation

Send To

1 (Arduino Uno R3)

Ultrasonic Distance Sensor

Name 1

```
1 int trigger_pin=2;
2 int echo_pin=3;
3 int buzzer_pin=10;
4 int time;
5 int distance;
6 void setup() {
7   Serial.begin(9600);
8   pinMode(trigger_pin, OUTPUT);
9   pinMode(echo_pin, INPUT);
10  pinMode(buzzer_pin, OUTPUT);
11 }
12 void loop()
13 {
14   digitalWrite(trigger_pin, HIGH);
15   delayMicroseconds(10);
16   digitalWrite(trigger_pin, LOW);
17   time=pulseIn(echo_pin, HIGH);
18   distance=(time*0.034)/2;
19   if(distance<=10){
20     digitalWrite(buzzer_pin, HIGH);
21     delay(100);
22     digitalWrite(buzzer_pin, LOW);
23   }
24   Serial.print("Door Open\n");
25   Serial.print("Distance=");
26   Serial.print(distance);
27   Serial.print("\n");
28 }
```

Serial Monitor

Door Open
Distance=6
Door Open
Distance=6
Door Open
Distance=6
Door Open
Distance=6

Send Clear

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.

Circuit design Neat Densor-Hango x New Tab x +

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Neat Densor-Hango

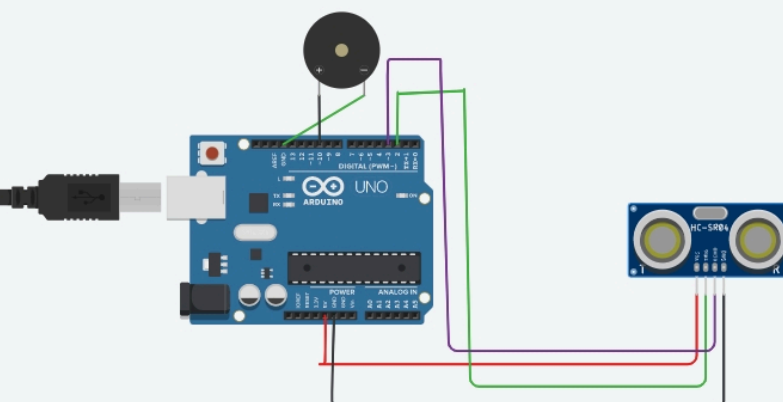
All changes saved

Code Start Simulation Send To

1 (Arduino Uno R3)

Ultrasonic Distance Sensor

Name 1



```
3 int buzzer_pin=10;
4 int time;
5 int distance;
6 void setup() {
7   Serial.begin(9600);
8   pinMode(trigger_pin, OUTPUT);
9   pinMode(echo_pin, INPUT);
10  pinMode(buzzer_pin, OUTPUT);
11 }
12 void loop()
13 {
14   digitalWrite(trigger_pin, HIGH);
15   delayMicroseconds(10);
16   digitalWrite(trigger_pin, LOW);
17   time=pulseIn(echo_pin, HIGH);
18   distance=(time*0.034)/2;
19   if(distance<=10){
20     Serial.println("Door Open");
21     Serial.print("Distance=");
22     Serial.println(distance);
23     digitalWrite(buzzer_pin, HIGH);
24     delay(500);
25   }
26   else{
27     Serial.println("Door Closed");
28     Serial.print("Distance=");
29     Serial.println(distance);
30     digitalWrite(buzzer_pin, LOW);
31     delay(500);
32   }
33 }
```

Serial Monitor

12:27 14-09-2022