

ASSIGNMENT-1

M.SUJITHA

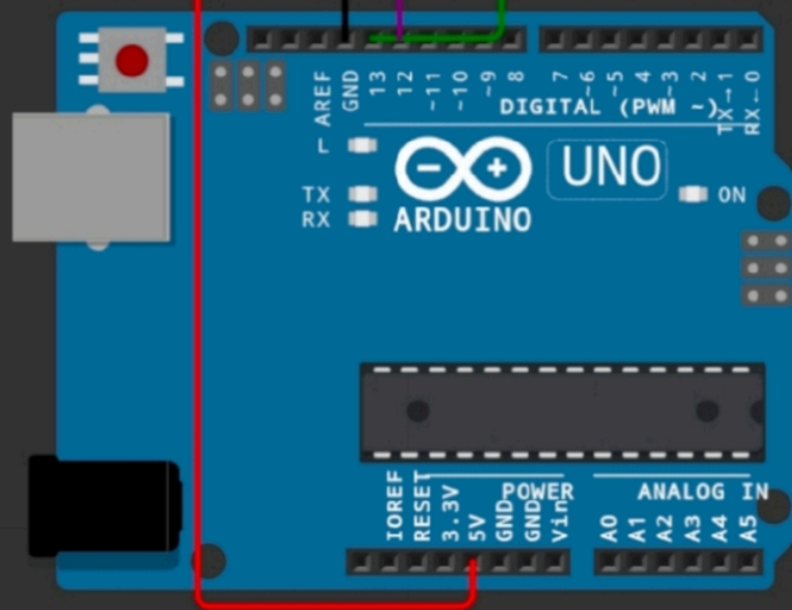
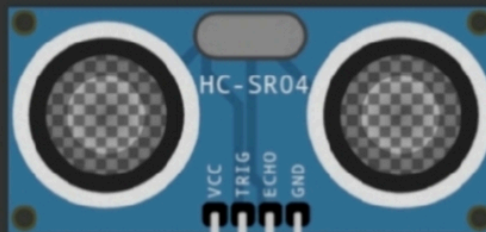
HOLY CROSS ENGINEERING COLLEGE

III YEAR ECE



Simulation

Code





Simulation

Code

*hc-sr04-Ultrasonic-Simulation.ino**diagram.json**Ultrasonic.h**Ultrasonic.cpp**Library Manager*

1 /*

2 Ultrasonic Simple

3 Prints the distance read by an ultrasonic sensor in
4 centimeters. They are supported two types of sensors (like HC-SC04) and three pins (two for
5 sensors (like HC-SC04) and three pins (two for
6 and Seed Studio sensors)).

7

8 The circuit:

9 * * Module HC-SC04 (four pins) or Pi
10 | three pins), attached to digital pins 12, 13 and GND.

11

12 | HC-SC04 | Arduino | | 3 pins

13

14 | Vcc | 5V | | Vcc

15 | Trig | 12 | OR | SIG

16 | Echo | 13 | | Gnd

17

18

19 Note: You do not obligatorily need a pull-up resistor on the Trig pin.

20

21 By default, the distance returned by the read() method is in centimeters. To get the distance in inches, you
22 method is in centimeters. To get the distance in inches, you
23 pass INC as a parameter.

24 Example: ultrasonic.read(INC)

25

26 created 3 Apr 2014

27 by Erick Simões (github: @ErickSimoes)

28 modified 23 Jan 2017

29 by Erick Simões (github: @ErickSimoes)

30 modified 03 Mar 2017

31 by Erick Simões (github: @ErickSimoes)



4:18

wokwi.com/projects/312346565007



4G



WOKWI



SIGN IN

Simulation

Code

hc-sr04-Ultrasonic-Simulation.ino ●

diagram.json

Ultrasonic.h

Ultrasonic.cpp

Library Manager

```
31 by Erick Simões (github: @ErickSi
32 modified 11 Jun 2018
33 by Erick Simões (github: @ErickSi
34
35 This example code is released int
36 */
37
38 #include "Ultrasonic.h"
39
40 /*
41 Pass as a parameter the trigger a
42 or only the signal pin (for senso
43 Ultrasonic ultrasonic(13);
44 */
45 Ultrasonic ultrasonic(12, 13);
46 int distance;
47
48 void setup() {
49     Serial.begin(9600);
50 }
51
52 void loop() {
53     // Pass INC as a parameter to get
54
55     distance = ultrasonic.read(CM);
56
57     Serial.print("Distance in CM: ");
58     Serial.println(distance);
59
60     distance = ultrasonic.read(INC);
61
```



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```
48 void setup() {  
49     Serial.begin(9600);  
50 }  
51  
52 void loop() {  
53     // Pass INC as a parameter to get  
54  
55     distance = ultrasonic.read(CM);  
56  
57     Serial.print("Distance in CM: ");  
58     Serial.println(distance);  
59  
60     distance = ultrasonic.read(INC);  
61  
62     Serial.print("Distance in Inches: ");  
63     Serial.println(distance);  
64  
65     delay(1000);  
66 }
```