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Code

Start Simulation

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1 (Arduino Uno R3)

```

1 // C++ code
2 //
3 int val = 0;
4
5 long readUltrasonicDistance(int triggerPin, int echoPin)
6 {
7     pinMode(triggerPin, OUTPUT); // Clear the trigger
8     digitalWrite(triggerPin, LOW);
9     delayMicroseconds(2);
10    // Sets the trigger pin to HIGH state for 10 microseconds
11    digitalWrite(triggerPin, HIGH);
12    delayMicroseconds(10);
13    digitalWrite(triggerPin, LOW);
14    pinMode(echoPin, INPUT);
15    // Reads the echo pin, and returns the sound wave travel time in microseconds
16    return pulseIn(echoPin, HIGH);
17 }
18
19 void setup()
20 {
21     pinMode(10, INPUT);
22     Serial.begin(9600);
23     pinMode(12, INPUT);
24     pinMode(13, OUTPUT);
25 }
26
27 void loop()
28 {
29     Serial.println(digitalRead(10));
30     if (digitalRead(12) == 1) {
31         digitalWrite(13, HIGH);
32     } else {
33         digitalWrite(13, LOW);
34     }
35     val = 0.01723 * readUltrasonicDistance(6, 5);
36     Serial.println(val);
37     if (val <= 50) {
38         digitalWrite(13, HIGH);
39     } else {
40         digitalWrite(13, LOW);
41     }
42     delay(10); // Delay a little bit to improve simulation performance
43 }

```