

Team ID	PNT2022TMID26397
Project Name	Project - IoT-Based Safety Gadget for Child Safety Monitoring and Notification

Code:

```
#include "Ultrasonic.h"

Ultrasonic ultrasonic(12, 13);

int distance;


void setup() {
    Serial.begin(9600);
}

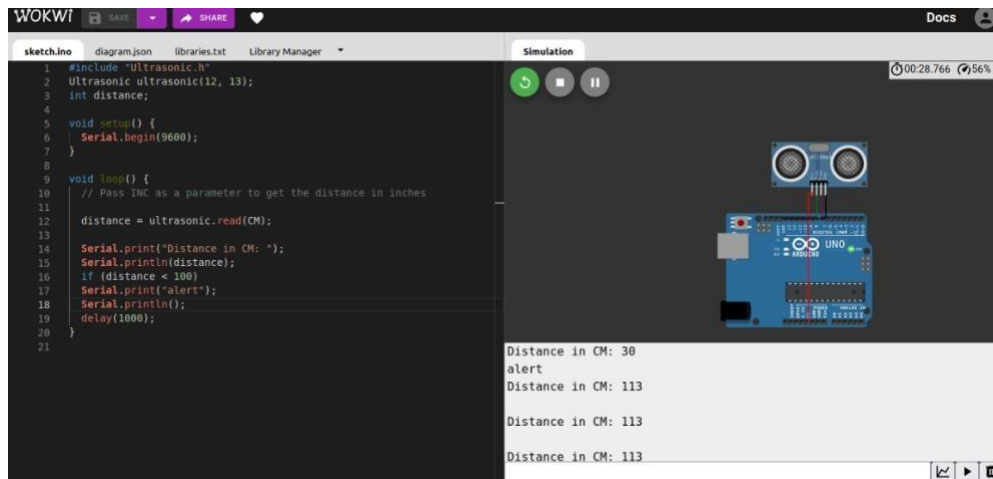

void loop() {
    // Pass INC as a parameter to get the distance in inches

    distance = ultrasonic.read(CM);

    Serial.print("Distance in CM: ");
    Serial.println(distance);    if
    (distance < 100)
        Serial.print("alert");
    Serial.println();    delay(1000);
```

}

Output:



The screenshot displays the Wokwi IDE interface. On the left, the 'sketch.ino' file is open, showing a C++ program that uses the Ultrasonic library. The code initializes an ultrasonic sensor at pin 12, sets the serial port to 9600, and reads distance values in the loop. A comment indicates that the distance is in inches. The loop prints the distance and triggers an 'alert' if the distance is less than 100 cm, followed by a 1000ms delay. On the right, the 'Simulation' window shows a virtual Arduino Uno board with an ultrasonic sensor module connected. Below the simulation, the serial monitor displays the output of the program.

```
1 #include "Ultrasonic.h"
2 Ultrasonic ultrasonic(12, 13);
3 int distance;
4
5 void setup() {
6   Serial.begin(9600);
7 }
8
9 void loop() {
10  // Pass INC as a parameter to get the distance in inches
11
12  distance = ultrasonic.read(CM);
13
14  Serial.print("Distance in CM: ");
15  Serial.println(distance);
16  if (distance < 100)
17    Serial.print("alert");
18    Serial.println();
19    delay(1000);
20 }
21
```

Distance in CM: 30
alert
Distance in CM: 113
Distance in CM: 113
Distance in CM: 113