

## ASSIGNMENT4

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TeamID	PNT2022TMID41867
RollNo	19CS38

**Write code and connections in wowki for ultrasonic sensor. Whenever distance is less than 100cms send “alert” to IBM cloud and display in device recent events.**

### **ProgramCode:**

```
#include
"Ultrasonic.h"Ultrasonic
ultrasonic(6,2);intdistanc
e;voidsetup()
{
Serial.begin(9600);
}
voidloop(){
distance =
ultrasonic.read(CM);Serial.prin
t("Distance in CM:
");Serial.println(distance);if(dist
ance<100)
```

```
Serial.print("alert");  
  
Serial.println();  
delay(3000);  
  
}
```

## OUTPUT:

The screenshot displays the Wokwi online IDE interface. On the left, the code for 'hc-sr04-Ultrasonic-Simulation.ino' is shown. It includes the 'Ultrasonic.h' library, initializes an ultrasonic sensor at pin 6 with 2 pins, sets the serial port to 9600, and enters a loop that reads the distance, prints it, and triggers an alert if the distance is less than 100cm, followed by a 3-second delay.

The right side of the interface shows a simulation of the hardware. An Arduino Uno is connected to an HC-SR04 ultrasonic sensor. The sensor's VCC is connected to the 5V pin, GND to GND, Trig to digital pin 6, and Echo to digital pin 2. The simulation output window shows the following sequence of printed messages:

```
Distance in CM: 317  
Distance in CM: 162  
Distance in CM: 47  
alert
```

The bottom of the screen shows a Windows taskbar with the system clock at 7:38 PM on 10/28/2022.