

ASSIGNMENT-4

DISTANCE DETECTION USING ULTRASONIC SENSOR

Date: 22 October 2022

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Maximum Marks 2 Marks

Question1 :

Write code and connections in wokwi for ultrasonic sensor. Whenever distance is less than 100 cms send "alert" to ibm cloud and display in device recent events.

WOKWI LINK :

<https://wokwi.com/projects/new/esp32>

Code:

```
#define LED 2
```

```
void setup() {  
  pinMode(LED, OUTPUT);  
}
```

```
void loop() {  
  digitalWrite(LED, HIGH);  
  delay(500);  
  digitalWrite(LED, LOW);  
  delay(500);  
}
```

```
{  
  "version": 1,  
  "author": "Uri Shaked",  
  "editor": "wokwi",  
  "parts": [  
    { "type": "wokwi-esp32-devkit-v1", "id": "esp", "top": 0, "left": 0, "attrs": {} },  
    {  
      "type": "wokwi-led",  
      "id": "led1",
```

```
    "top": -3.33,  
    "left": 153.33,  
    "attrs": { "color": "red" }  
  },  
  { "type": "wokwi-resistor", "id": "r1", "top": 85.33, "left": 110, "rotate": 90, "attrs": {} }  
],  
"connections": [  
  [ "esp:TX0", "$SerialMonitor:RX", "", [] ],  
  [ "esp:RX0", "$SerialMonitor:TX", "", [] ],  
  [ "esp:GND.1", "led1:C", "black", [ "h0" ] ],  
  [ "led1:A", "r1:1", "green", [ "v0" ] ],  
  [ "r1:2", "esp:D2", "green", [ "h0", "v38" ] ]  
]  
}
```