Assignment no - 4

Assignment Date	28 October 2022
Student Name	D Pravina
Student Roll Number	820419106040
Maximum Marks	2 Marks

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

```cpp
#define PIN_TRIG 7
#define PIN_ECHO 8
void setup()
{
Serial.begin(115200);
pinMode(PIN_TRIG, OUTPUT);
pinMode(PIN_ECHO, INPUT);
}
void loop()
{
digitalWrite(PIN_TRIG, HIGH);
delayMicroseconds(10);
digitalWrite(PIN_TRIG, LOW);
int d = (pulseIn(PIN_ECHO, HIGH))/58;
Serial.print("Distance in CM: ");
Serial.println(d);
if(d < 100)
{
Serial.println("Alert !!!");
}
delay(1000);
}
```
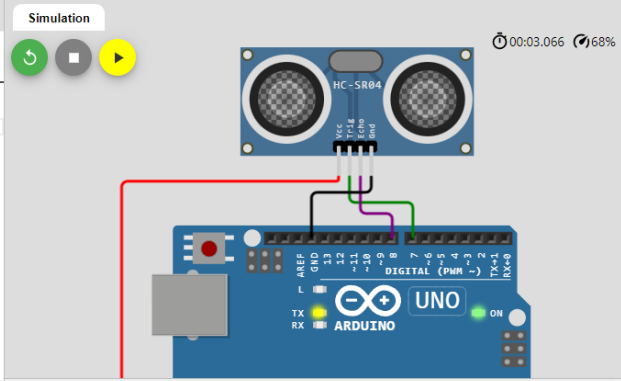
```
1    #define PIN_TRIG 7
2    #define PIN_ECHO 8
3    void setup()
4    {
5    Serial.begin(115200);
6    pinMode(PIN_TRIG, OUTPUT);
7    pinMode(PIN_ECHO, INPUT);
8    }
9    void loop()
10   {
11   digitalWrite(PIN_TRIG, HIGH);
12   delayMicroseconds(10);
13   digitalWrite(PIN_TRIG, LOW);
14   int d = (pulseIn(PIN_ECHO, HIGH))/58;
15   Serial.print("Distance in CM: ");
16   Serial.println(d);
17   if(d < 100)
18   {
19   Serial.println("Alert !!!");
20   }
21   delay(1000);
22   }
```

Serial Monitor output:
```
Alert !!!
Distance in CM: 76
Alert !!!
Distance in CM: 76
Alert !!!
Distance in CM: 76
Alert !!!
```

wokwi share link :