ASSIGNMENT 4:

Date	27th October 2022
Team ID	PNT2022TMID15034
Project Name	IOT Based Real-Time River Water Quality Monitoring and Control System

```cpp
long int echoPin=2;
long int trigPin=3;
long duration;
int distance;
void setup()
{
  Serial.begin(9600);
  pinMode(3,OUTPUT);
  pinMode(2,INPUT);
}

void loop()
{
  digitalWrite(3,LOW);
  delayMicroseconds(2);
  digitalWrite(3,HIGH);
  delayMicroseconds(10);
  digitalWrite(3,LOW);

 duration=pulseIn(2,HIGH);
  distance=(duration*0.034/2);
  delay(1000);
  if (distance<=100)
  {
    Serial.println("ALERT The Distance is less than 100cm");
  }

}
```

sketch.ino   diagram.json   Library Manager ▾

```
1   long int echoPin=2;
2   long int trigPin=3;
3   long duration;
4   int distance;
5   void setup()
6   {
7     Serial.begin(9600);
8     pinMode(3,OUTPUT);
9     pinMode(2,INPUT);
10  }
11
12  void loop()
13  {
14    digitalWrite(3,LOW);
15    delayMicroseconds(2);
16    digitalWrite(3,HIGH);
17    delayMicroseconds(10);
18    digitalWrite(3,LOW);
19
20   duration=pulseIn(2,HIGH);
21    distance=(duration*0.034/2);
22    delay(1000);
23    if (distance<=100)
24    {
25      Serial.println("ALERT The Distance is less than 100cm");
26    }
27
28  }
29  //TeamId : PNT2022TMID15034
30
```

Simulation

⏱ 00:44.125 ⏲ 99%

Editing Ultrasonic Distance Sensor   ✕
Distance: 231cm

```
1   long int echoPin=2;
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7     Serial.begin(9600);
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20   duration=pulseIn(2,HIGH);
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22    delay(1000);
23    if (distance<=100)
24    {
25      Serial.println("ALERT The Distance is less than 100cm");
26    }
27
28  }
29  //TeamId : PNT2022TMID15034
30
```

Simulation

⏱ 00:05.911 ⏲ 99%

Editing Ultrasonic Distance Sensor   ✕
Distance: 73cm


```
ALERT The Distance is less than 100cm
ALERT The Distance is less than 100cm
ALERT The Distance is less than 100cm
ALERT The Distance is less than 100cm
ALERT The Distance is less than 100cm
```

Add Device ⊕

criteria. To get started, you can add devices by using the Add Device button, or by using API.

🔍 Search by Device ID

Device Simulator ⬤   ▯ ▽

	Device ID	Status	Device Type	Class ID	Date Added	Descriptive Location	Added By
☑	54321	🚫 Disconnected	ESP32	Device	Oct 28, 2022 9:40 PM		611819106036@smartinternz.com

→ •••

Identity   Device Information   Recent Events   State   Logs   ✕

The recent events listed show the live stream of data that is coming and going from this device.

Event	Value	Format	Last Received
distance	{"distance":150}	json	a few seconds ago
distance	{"distance":167}	json	a few seconds ago
distance	{"ALERT":28}	json	a few seconds ago
distance	{"distance":191}	json	a few seconds ago
distance	{"ALERT":94}	json	a few seconds ago