

ASSIGNMENT- 1

Date	16 September 2022
Team ID	PNT2022TMID33098
Project Name	Project -Real-Time River Water Quality Monitoring and Control System
Maximum Marks	2 Marks

```
const int echoPin=2, triggerPin=3, red=4, green=5, blue=6;
```

```
const int buzz = 7;
```

```
int pulseValue;
```

```
float distance;
```

```
void setup( ) {
```

```
pinMode(echoPin, INPUT);
```

```
pinMode(triggerPin, OUTPUT);
```

```
pinMode(red, OUTPUT);
```

```
pinMode(green, OUTPUT);
```

```
pinMode(blue, OUTPUT);
```

```
pinMode(buzz, OUTPUT);
```

```
Serial.begin(9600);
```

```
}
```

```
void loop( )
```

```
{
```

```
digitalWrite(triggerPin, LOW);  
delayMicroseconds(5);  
digitalWrite(triggerPin, HIGH);  
delayMicroseconds(10);  
pulseValue=pulseIn(echoPin, HIGH);  
distance=(pulseValue*0.0001657*39.37);
```

```
if (distance<=5)  
{  
    digitalWrite(red, HIGH);  
    digitalWrite(green, LOW);  
    digitalWrite(blue, LOW);  
    tone(buzz, 500);  
}
```

```
else if (distance<=10)  
{  
    digitalWrite(green, HIGH);  
    digitalWrite(red, LOW);  
    digitalWrite(blue, LOW);  
    tone(buzz, 1000);  
}
```

```
else  
{  
    digitalWrite(blue, HIGH);
```

```
digitalWrite(red, LOW);  
digitalWrite(green, LOW);  
tone(buzz, 1500);  
}
```

```
Serial.print(distance);  
Serial.println(" inch/es");  
delay(500);  
}
```

Output:

