ASSIGNMENT-4

Date	26 October 2022
Team ID	PNT2022TMID47356
Project Name	Industry-Specific Intelligent Fire Management System
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CODE:

```
#define ECHO_PIN 2

 #define TRIG_PIN 3

void setup() {

Serial.begin(115200);

pinMode(LED_BUILTIN, OUTPUT);

pinMode(TRIG_PIN, OUTPUT);

pinMode(ECHO_PIN, INPUT);

}

float readDistanceCM() {

digitalWrite(TRIG_PIN, LOW);

delayMicroseconds(2);

digitalWrite(TRIG_PIN, HIGH);

delayMicroseconds(10);

 digitalWrite(TRIG_PIN, LOW);

int duration = pulseIn(ECHO_PIN, HIGH);
```

```cpp
 return duration * 0.034 / 2;

}

void loop()

{

 float distance = readDistanceCM();

bool isNearby = distance < 100;

digitalWrite(LED_BUILTIN, isNearby);

Serial.print("Measured distance: ");

Serial.println(readDistanceCM());

delay(100);

}
```

CIRCUIT:


```
Measured distance: 177.16
Measured distance: 177.24
Measured distance: 177.16
Measured distance: 177.26
Measured distance: 177.16
Measured distance: 177.26
Measured distance: 177.16
```