

KCG COLLEGE OF TECHNOLOGY

Department of Computer Science and Engineering

Assignment 4

Topic : Ultra Sonic Sensor using RPi

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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);
    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);
}
```

Link: <https://wokwi.com/projects/348210025414525522>

Screenshots :

