Assignment -4 Python Programming

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Question-1:

write a code and connections in wokwi for ultrasonic sensor

Solution:

#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);

}

Wokwi link : <https://wokwi.com/projects/345781784553718355>

output :



