

```

// YWROBOT

// Compatible with the Arduino IDE 1.0

// Library version:1.1

#include <LiquidCrystal_I2C.h>

LiquidCrystal_I2C lcd(0x27,20,4);

// set the LCD address to 0x27 for a 16 chars and 2 line display

float cm;

float inches;

long readUltrasonicDistance(int triggerPin, int echoPin)
{
    pinMode(triggerPin, OUTPUT); // Clear the trigger
    digitalWrite(triggerPin, LOW);
    delayMicroseconds(2);
    // Sets the trigger pin to HIGH state for 10 microseconds
    digitalWrite(triggerPin, HIGH);
    delayMicroseconds(10);
    digitalWrite(triggerPin, LOW);
    pinMode(echoPin, INPUT);
    // Reads the echo pin, and returns
    // the sound wave travel time in microseconds
    return pulseIn(echoPin, HIGH);
}

void setup()
{

```

```

Serial.begin(9600);

lcd.init();      // initialize the lcd

// Print a message to the LCD.

lcd.backlight();

lcd.print("--> Distance <--");

    delay(3000);

    lcd.clear();

}

void loop()
{
    cm = 0.0344/2 * readUltrasonicDistance(3, 2);

    inches = (cm / 2.54);

    /*

        Serial.print("Inches ");
        Serial.print(inches, 1);
        Serial.print("\t");

    Serial.print("cm ");

        Serial.println(cm, 1);

    */

    lcd.setCursor(0,0);

    lcd.print("Inches");

    lcd.setCursor(4,0);

    lcd.setCursor(12,0);

    lcd.print("cm");

    lcd.setCursor(1,1);

    lcd.print(inches, 1);

    lcd.setCursor(11,1);

    lcd.print(cm, 1);

```

```
    lcd.setCursor(14,1);  
    delay(2000);  
    lcd.clear();  
}
```