



```

#include <LiquidCrystal.h> //LCD library

#define echo 2
#define trig 3

float duration;
float distance;

int sensor_Input;

float temp;// oneway distance travelled by the pulse

LiquidCrystal lcd(13, 12, 11, 10, 9, 8); //lcd(RS,EN,D4,D5,D6,D7)

void setup() {
    pinMode(trig, OUTPUT);
    pinMode(echo, INPUT);
    Serial.begin(9600);
    lcd.begin(16, 2);
}

void loop() {
    time_Measurement();
    distance = duration * (0.0343) / 2; // calculate the oneway distance travelled by the pulse
    display_distance();
    measure_Temp();
}

```

```
void time_Measurement()
{
    digitalWrite(trig, LOW);
    delayMicroseconds(2);
    digitalWrite(trig, HIGH);
    delayMicroseconds(10);
    digitalWrite(trig, LOW);
    duration = pulseIn(echo, HIGH);
}

void measure_Temp()
{
    sensor_Input = analogRead(A0);
    temp = (float)sensor_Input / 1024;
    temp = temp * 5;
    temp = temp - 0.5;
    temp = temp * 100;
    Serial.print("Temp in C: ");
    Serial.print(temp);
    Serial.println();
}

void display_distance()
{
    Serial.print("Distance in Cm: ");
    Serial.print(distance);
    Serial.println();
    delay(1000);
}
```