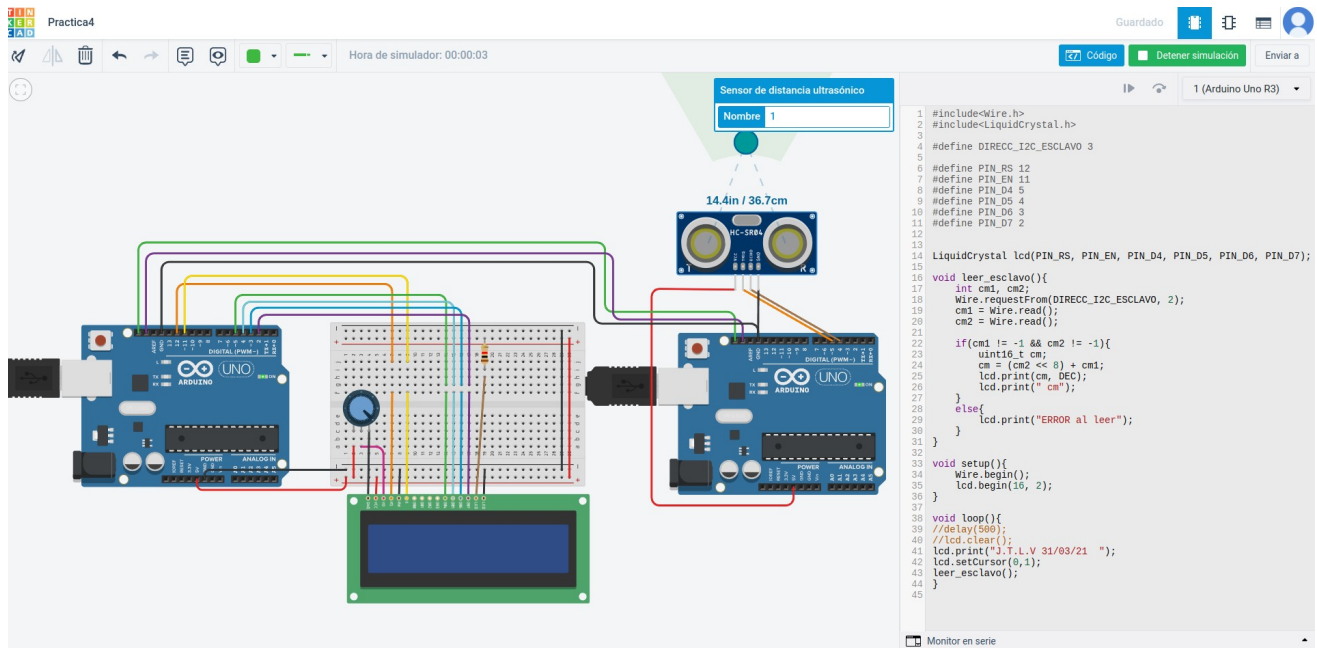


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Vinculo Tinkercad: <https://www.tinkercad.com/things/hgTnp5ModwZ>

Captura pantalla



Codigos fuente:

Master

```
#include<Wire.h>
#include<LiquidCrystal.h>
```

```
#define DIRECC_I2C_ESCLAVO 3
```

```
#define PIN_RS 12
```

```
#define PIN_EN 11
```

```
#define PIN_D4 5
```

```
#define PIN_D5 4
```

```
#define PIN_D6 3
```

```
#define PIN_D7 2
```

```
LiquidCrystal lcd(PIN_RS, PIN_EN, PIN_D4, PIN_D5, PIN_D6, PIN_D7);
```

```
void leer_esclavo(){
    int cm1, cm2;
    Wire.requestFrom(DIRECC_I2C_ESCLAVO, 2);
    cm1 = Wire.read();
```

```

    cm2 = Wire.read();

    if(cm1 != -1 && cm2 != -1){
        uint16_t cm;
        cm = (cm2 << 8) + cm1;
        lcd.print(cm, DEC);
        lcd.print(" cm");
    }
    else{
        lcd.print("ERROR al leer");
    }
}

void setup(){
    Wire.begin();
    lcd.begin(16, 2);
}

void loop(){
    //delay(500);
    //lcd.clear();
    lcd.print("J.T.L.V 31/03/21 ");
    lcd.setCursor(0,1);
    leer_esclavo();
}

```

Esclavo

```

#include<Wire.h>

#define DIRECC_I2C 3

#define PIN_DISPARDOR 5
#define PIN_ECO 4
#define TIMEOUT_ECO 23200 // <anchura máxima del pulso generado por el módulo>

uint16_t cm;

```

```
unsigned long leeDistancia(uint8_t triggerPin, uint8_t ecoPin){
    delayMicroseconds(2);
    digitalWrite(triggerPin, HIGH);
    delayMicroseconds(10);
    digitalWrite(triggerPin, LOW);
    return pulseIn(ecoPin, HIGH, TIMEOUT_ECO);
}
```

```
void callback_peticion_i2c(){
cm = leeDistancia(PIN_DISPARDOR, PIN_ECO) / 58;
    uint8_t b[2];
    b[0]=lowByte(cm);
    b[1]=highByte(cm);
    Wire.write(b, 2);
}
```

```
void setup(){
    pinMode(PIN_DISPARDOR, OUTPUT);
    pinMode(PIN_ECO, INPUT);
    digitalWrite(PIN_DISPARDOR, LOW);

    Wire.begin(DIRECC_I2C);
    Wire.onRequest(callback_peticion_i2c);
}
```

```
void loop(){}

```