

## Project 17 - Ultrasonic Sensor Code

Copy and Paste the code below into the Arduino sketch window. Verify and upload the code to the board.

```
#include <LiquidCrystal.h>
#define trigPin 10
#define echoPin 13

LiquidCrystal lcd(12, 11, 5, 4, 3, 2);

void setup() {
  pinMode(trigPin, OUTPUT);
  pinMode(echoPin, INPUT);
}

void loop() {
  float duration, distance;
  digitalWrite(trigPin, LOW);
  delayMicroseconds(2);

  digitalWrite(trigPin, HIGH);
  delayMicroseconds(10);
  digitalWrite(trigPin, LOW);

  duration = pulseIn(echoPin, HIGH);
  distance = (duration / 2) * 0.0344;

  if (distance >= 400 || distance <= 2){
    lcd.print("Out of range");
    delay(500);
  }
  else {
    lcd.print(distance);
    lcd.print(" cm");
    delay(500);
  }
  delay(500);
  lcd.clear();
}
```