

```

// -----Title-----
/*
  File: lcd2.ino
  Started: 11/1/13
  Program Description: Scrolls message to the
  right then to the left.

*/
// ----Connections-----
/*
 * LCD pin 1 to ground
 * LCD pin 2 to 5V
 * LCD VO pin 3 to wiper of 25 K potentiometer
 * LCD RS pin 4 to digital pin 12
 * LCD R/W pin 5 to ground
 * LCD Enable pin 6 to digital pin 11
 * LCD D4 pin 11 to digital pin 5
 * LCD D5 pin 12 to digital pin 4
 * LCD D6 pin 13 to digital pin 3
 * LCD D7 pin 14 to digital pin 2
*/
// ----Initializations-----

// Include the library code:
#include <LiquidCrystal.h>

// Initialize the library with the numbers of the
// UNO interface pins.
// Syntax: LiquidCrystal(rs, enable, d4, d5, d6, d7)
LiquidCrystal lcd(12, 11, 5, 4, 3, 2);

void setup() {
  // Set up the LCD's number of columns and rows:
  // Syntax: lcd.begin(cols, rows)
  lcd.begin(16, 2);
  // Print "Hello" to the LCD.
  // Syntax: lcd.print(char, byte, int, long, or string)
  lcd.print("Hello");
  // Set the cursor to column 0, line 1

```

```
// Syntax: lcd.setCursor(col, row)
// col: the column at which to position the cursor (with 0
// being the first column)
// row: the row at which to position the cursor (with 0
// being the first row)
lcd.setCursor(0, 1);
lcd.print("World");
// Delay 1000 ms before starting to scroll.
delay(1000);
}

// -----Main Code-----

void loop() {
    // Scroll 11 positions to the right using a for loop:
    for (int positionCounter = 0; positionCounter < 11;
positionCounter++) {
        // Scroll one position at a time to the right:
        lcd.scrollDisplayRight();
        // Wait 150 ms:
        delay(150);
    }

    // Scroll back 11 positions to the left using a for loop:
    for (int positionCounter = 0; positionCounter < 11;
positionCounter++) {
        // Scroll one position at a time to the left:
        lcd.scrollDisplayLeft();
        // Wait 40 ms:
        delay(40);
    }
}
```