

CODE TO NOTE

LCD LIBRARY:

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

Includes the [LiquidCrystal](#) library in your program.

LCD LIBRARY INSTANCE:

```
LiquidCrystal LCD_name(RS_pin,  
enable_pin, d4, d5, d6, d7);
```

As with servos, you need to create an LCD object and give it a name (you can make more than one). The numbers in the brackets are pins on the RedBoard that connect to specific pins on the LCD.

LCD BEGIN:

```
lcd.begin(16, 2);
```

This line initializes the LCD object and tells the program the LCD's dimensions. In this case it is 2 rows of 16 characters each.

LCD CLEAR:

```
lcd.clear();
```

This method clears all the pixels on the display.

LCD CURSOR:

```
lcd.setCursor(0,0);
```

Moves the cursor to a point on the 16x2 grid of characters. Text that you write to the LCD will start from the cursor. This line is starting back at position (0,0).

LCD PRINT:

```
lcd.print("Hello, world!");
```

Prints a string of characters to the LCD starting at the cursor position.

CODING CHALLENGES

CHANGE THE MESSAGE: Try changing the code to display another message.

SHOW HOURS, MINUTES AND SECONDS: Try adding some code so that the display shows the hours, minutes and seconds that have passed since the RedBoard was last reset.

COUNT BUTTON PRESSES: By adding a button to the circuit, you can count the number of times the button was pressed or have the button change what displays.