



LCD "HELLO, WORLD!"

TEMPERATURE SENSOR

"DIY WHO AM I?"  
GAME



## PROJECT 4

Printing data to the Arduino Serial Monitor is a great way to see data from the RedBoard. But, what if you want to make your project mobile and see sensor values away from your computer? This project will show you how to do exactly that. You'll learn about **Liquid Crystal Displays (LCDs)** and how to print things like sensor data and strings of words to the display.

### NEW COMPONENTS INTRODUCED IN THIS PROJECT

- LIQUID CRYSTAL DISPLAY (LCD)
- TMP36 DIGITAL TEMPERATURE SENSOR
- 4XAA BATTERY HOLDER

### NEW CONCEPTS INTRODUCED IN THIS PROJECT

- CONTRAST
- PIXELS
- ALGORITHMS
- BUTTON DEBOUNCE
- STRINGS
- POINTERS

### YOU WILL LEARN

- HOW TO PRINT SIMPLE MESSAGES TO AN LCD
- HOW TO USE A TEMPERATURE SENSOR
- HOW TO PRINT SENSOR DATA TO AN LCD
- HOW TO MAKE AN INTERACTIVE GAME THAT INCORPORATES THE LCD