Since there’s nothing like doing things yourself, we start by having you dive right in with typing in, and running, some simple JavaScript programs.

For now, don’t worry about fully understanding them; we just want to make sure that you get the feel for how to type them into the computer then make the computer do their bidding.

At this stage, your most likely issues with these programs will be typos, so watch what you type.

How does one run JavaScript? Let us list the ways…

- Most browsers will accept JavaScript in the location bar: type `javascript:` followed by the code to run (in one line).
- Visit the scratch, runner, or playground pages on http://javascript.cs.lmu.edu, type in some code, then click Run.
- Look for a “JavaScript console” add-on or web site, type in some code, then press Enter or Return.
- Prepare a web page with JavaScript in it, then load that web page into a web browser.

The last mechanism (JavaScript-in-a-web-page) is the way “the pros” do it — but it’s also the most complicated. We’ll get to that after you’re used to the simpler ways.
On to Some JavaScript Code

• The following examples give you a taste of what JavaScript can do; type them in exactly as shown.

• Two types of code are shown — the first set is meant to be typed into your web browser’s location text field; the second is meant to be typed into the text area on any of these http://javascript.cs.lmu.edu pages:
  ◦ http://javascript.cs.lmu.edu/scratch
  ◦ http://javascript.cs.lmu.edu/runner
  ◦ http://javascript.cs.lmu.edu/playground

For Your Browser’s Address/Location Text Field

Each line is a separate program:

javascript:alert("Hello world!");
javascript:alert("Hello " + prompt("What is your name?") + "!");
javascript:alert("10 times 10 times 10 = " + (10 * 10 * 10));
javascript:alert("This is how a computer shouts!").toUpperCase();
javascript:window.document.body.innerHTML = "This page is mine!";
javascript:window.document.location = "http://www.facebook.com";
javascript:(new Function(prompt("Type some JavaScript:"))());
For the JavaScript Scratch/Runner/Playground Page

Type these examples into the text area and click on Run. You can run without retyping by clicking on Run again. And again. And again :) Blank lines separate the individual programs; you can also run them all in sequence by typing all of them into the text area (that's a lot of typing!):

```
alert("Your computer dice just rolled a " +
   (Math.floor(Math.random() * 12) + 1) + "!");

alert("I like " + prompt("Please enter a city:")) + " in " +
prompt("Please enter a month:")) + ", how about you?");

alert("Hello world!");

var text = prompt("Type something for me to count:");
alert("" + text + " has a length of " + text.length() + ".");

var value = parseFloat(prompt("Type a number for me to double:"));
alert(value + " doubled is " + (value * 2) + "!");

var score = parseFloat(prompt("Give me a test score:"));
var total = parseFloat(prompt("Out of how many points?"));
alert("That's " + ((score / total) * 100) + "%!");

var answer = Math.floor(Math.random() * 3) + 1;
var guess = parseInt(prompt("Guess a number from 1 to 3:"));
alert(((guess === answer) ? "Yes!" : "Sorry!")
   + " I had " + answer + ", and you guessed " + guess + ".");

if (Math.floor(Math.random() * 2) === 0) {
   alert("Heads!");
} else {
   alert("Tails!");
}
```
Comments

• Ironically, one of the first good habits that you should pick up is how to enter something into a program that the computer will ignore

• Ignored text items in your code are called comments: they are messages not for the computer, but for the human being who is reading the code

• Anything between /* and */ is a comment, and can be as many lines as you like

• Anything after // is a comment, up to the end of the line

• Try typing comments into any of the programs above; you’ll notice that they don’t affect their behavior at all, such as with this modified heads-or-tails picker:

```javascript
// We use 0 to represent heads, and 1 to represent tails.
if (Math.floor(Math.random() * 2) === 0) {
    alert("Heads!"); // The computer randomly chose 0.
} else {
    alert("Tails!"); /* The computer randomly chose 1; no other number is possible! */
}
```

• You may ask — what are these for?? The answer is: when programs start getting more complicated, the person reading the program might need some help with understanding it...comments are the “first line of information” when trying to understand a program (after the code itself, of course)
Other Jumpstart Fundamentals

In case you want to dabble further…Right. Now.

• Programming languages also need punctuation; in JavaScript, use semicolons (;) to separate statements

• Remember that anything entered via `prompt` is interpreted as text — use `parseInt` or `parseFloat` to convert them into numbers

• You won’t mess up your computer by entering code it doesn’t understand — so feel free to experiment; just ask me if you get stuck

Moving Forward

• Feel free to tweak the examples you’ve seen — say, to customize the messages that are shown, or to do something different with what the user enters

• `http://javascript.cs.lmu.edu` contains some more complicated programs that have been “pre-typed” for you — give them a try:
  ◦ `http://javascript.cs.lmu.edu/scratch/phrase-to-phone`
  ◦ `http://javascript.cs.lmu.edu/scratch/phone-to-phrase`