# Getting started

Ref Javascript

## Your first program

A program is a list of instructions for the computer. In JavaScript, each instruction is a statement, and the computer runs the statements from top to bottom.

`console.log(...)` prints a value in the console, the text area under the code:

```
console.log("Hello, world!");
console.log(7 * 6);   // 42
```

- Text goes inside quotes: `"Hello"` or `'Hello'`. Numbers do not.
- End each statement with a semicolon `;`. JavaScript can often guess where one is missing, but writing it is clearer.
- JavaScript is case-sensitive: `console.log` works, `Console.Log` does not.

`console.log` can print several values at once. It puts one space between them:

```
console.log("Total:", 3 + 4);   // Total: 7
console.log(1, 2, 3);           // 1 2 3
```

## Comments & code style

A comment is a note for people. JavaScript ignores it when the program runs.

```
// A one-line comment starts with two slashes.
console.log("This line runs");   // a comment can follow code

/* A block comment
   can cover several lines. */
console.log("So does this one");
```

Good style makes code easy to read:

- Indent the lines inside `{ }` by two or four spaces, and do it the same way every time.
- Give variables names that say what they hold: `total`, not `t`.
- JavaScript names use camelCase: `firstName`, `scoreTotal`.



```
// Work out the area of a rectangle
const width = 4;
const height = 3;
console.log(width * height);   // 12
```

### Common mistakes

- Text needs matching quotes: `"Hi'` is an error.
- `console.log` is all lower case: `Console.log` and `console.Log` are errors.
- Everything after `//` on a line is ignored, so `// console.log(x)` prints nothing.