

# Exercise 1

## JAVASCRIPT VARIABLES

Please study the following values: 31, 7, 60, 24, 52, 12, 86400.

Now, cover up the values and tell me the fifth number.

Tough, huh? Maybe I can make it a little easier for you. Let's start with this:

```
daysInJanuary = 31
daysInWeek = 7
secondsInMinute = 60
hoursInDay = 24
weeksInYear = 52
monthsInYear = 12
secondsInDay = 86400
```

I've given you sort of cheat sheet. Now, instead of asking you for the fifth number, I can ask you for the number of weeks in a year. Pretty easy now?

Programmers deal with lots of values. Things like the total of a shopping cart. Or a customer's street address. Or their year of birth. Or their login username and password. What the cheat sheet above did was provide *context* as to a value by giving it a meaningful name.

In the world of programming, we call these meaningful names *variables*. All languages have them and all variables consist of two parts: a *name* and a *value*. In the following *variable assignment*, which is the name and which is the value?

??? — monthsInYear = 12 — ???

We call code like this a variable assignment because we *assign* a value to a name. Different languages have different ways of assigning variables. In JavaScript (the language you'll be learning on your way to becoming a professional front-end programmer) we do it like this:

```
let monthsInYear = 12
```

So, if you wanted to create a variable to store the number of feet in a mile (5280) how would you write the code?

You have some choices as far as the name. You might use any of these:

```
feetInMile
feetPerMile
numberOfFeetInMile
```

Or perhaps your native language isn't English, but German. That's fine:

```
fußInEinerMeile
```

You've got wide latitude in how you name variables.

The important things to note in assigning a variable is that it starts with `let` followed by the variable name, which is then followed by `=` sign and then the value.

```
let feetInMile = 5280
```

## TRYING IT OUT IN A REPL

Open your Chrome browser and head over to Exercise 1.

Click on the `index.js` tab.

Hmm...it *looks* like a variable assignment, starting with `let`, then a name, then the `=` sign. But what's the value?

In the previous preschool exercise, we used a *function* called `alert`. That created a pop-up box that displayed some information. In this exercise, we use a sibling to `alert` called `prompt`. It also creates a pop-up box, but also provides the user a text input box in which they can provide information.

There are only a few restrictions in variable naming — such as variable names can't have spaces in them — but the rules are simple and few. We'll get to them later.

Now, we can display the same web page to different users (presumably with different names) and ask them for the value of `firstName`.

Try it out!

What do you want to  
name the variable?

- Now, it's your turn. After the first variable assignment of `firstName`, create another one — this time asking the user for their last name.

Try it out again. Did you get two pop-up boxes? If not, see if you can spot and replicate the pattern from the `firstName` assignment.

Did you get it? Well done! You've managed to do one of the most important and common operations in programming: creating a variable. And just think — you did it without having any programming gene or being a super-genius.

But we're not doing much with those variables. Let's fix that in the next assignment.