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
```

In the question above, monthsInYear is the name. 12 is the value.

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
```

In variable assignments, the name is always to the left of the = sign, and the value always to the left.

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

```
fußInEinerMeile
```

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

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.

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.

Whatever the user types into that text box is the *value* that will be assigned to `firstName`.

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!

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

What do you want to name the variable?

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.