Practice: Programming Fundamentals

Programming Fundamentals **Overview**

To solidify your knowledge, here are a set of exercises that will require you to use the techniques you've just learned in the lesson.

They are organized into *small*, *medium*, and *large* sized problems. The small exercises will be very similar to the examples in the lesson. If you get stuck, refer to the relevant section in the lesson. The medium exercises will require you to combine concepts. The lesson may not have a single, specific example for you to reference. The large exercises are more open-ended and may require you to search the web for additional material.

Small Exercises

1. Writing a recipe

1. Create a new folder called `recipe-exercises` and add a file called `script.js` inside of it (using the `mkdir` and `touch` commands).

▶ **Solution**

2. Write out a function definition called `marinaraSauce()`. Be sure to be mindful of your syntax!

▶ **Solution**

3. Inside this function, write a series of `console.log();` statements that will print the following marinara sauce recipe:

```
- Heat a medium-large saucepan over medium heat.

- Add 2 tspns of oil and 5 carlic cloves, cook until golden, about
 2 minutes

- Add 1/4 cup water, 2 cans of crushed tomates, and salt and season
with black pepper to taste.
```

```
- Cover the pot, bring to a boil, reduce the heat to medium low, an
d simmer until the sauce is heated, about 10 minutes

- Stir in 1/4 cup roughly chopped fresh basil, salt and pepper as n
eeded.
```

▶ **Solution**

4. After your function definition, write the line of code that will invoke your function

▶ **Solution**

5. Run your script with node script.js. You should see your recipe printed to the screen!

▶ **Solution**

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2. Using Parameters

1. In your function definition, change `marinaraSauce()` to take one parameter called `cookName`.

▶ **Solution**

2. Use `cookName` to print "Hey, cookName! This is my marinara sauce recipe!" before the recipe.

▶ **Solution 1**

▶ **Solution 2**

3. Change your function invocation to take "Adam" as a `cookName`

▶ **Solution**

4. When you run your script, you should see "Hey, Adam! This is my marinara sauce recipe!", followed by the recipe.

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3. Using Variables

1. A the top of your function definition, define a variable called `two`, and assign it the number value `2`.

▶ **Solution**

2. Use string concatenation (i.e. the "+" sign) to replace any instance of 2 or 1/4 that occurs in the recipe.

▶ Solution