6. Functions

Exercise 6.1

Write a function named `printHelloWorld` that takes no arguments and returns nothing. It should print "Hello, World!".

Exercise 6.2

Write a function `greet` that takes the name of a person (e.g. "Donald Trump") as input and prints a greeting to that person (e.g. "Hello, Donald Trump!").

Exercise 6.3

Write a function `greeting` that takes the name of a person (e.g. "Donald Trump") as input and returns a greeting string (e.g. "Hello, Donald Trump!") that can be printed.

Exercise 6.4

Write a function `greet` that takes the first name and last name of a person (e.g. "Donald" and "Trump") as two separate input parameters and prints a greeting to that person (e.g. "Hello, Donald Trump!").

Exercise 6.5

Write a function `split(name: String)` that takes a name (e.g. "Donald Trump") as input and returns the first and the last name separated into a tuple with two elements. To split a string into an array with " " as separator, you can use the following:

```
let name = "Donald Trump"
let names: [String] = name.components(separatedBy: " ")
```
The function should be able to handle the following cases without crashing:

```
split(name: "Donald Trump")
split(name: "Batman")
split(name: "")
split(name: "Dwayne \"The Rock\" Johnson")
```

Exercise 6.6

Write a function `square` that takes an Int as input, but doesn't require a label at the call site, i.e. `square(3)` should work. It should return the square of the input value.

Exercise 6.7

Write a function `whoAmI` that takes a name as input parameter. If the name is "Bruce Wayne", the function should return "I am Batman", otherwise return "I am not Batman". The input parameter should have a default value of "Bruce Wayne".

Exercise 6.8

Write a function `sum` that takes a variable number of integers as input and returns the sum of the numbers.