

INTRODUCTION TO **JAVASCRIPT** FUNCTIONS

FUNCTIONS

Generally speaking, a function is a "subprogram" that can be called by code outside of the function. A function is composed of a sequence of statements, just like any other program.

Values can be *passed* to a function as input, while the function can also *return* values as output.

To call a function, simply type the name of the function in your text editor followed by a pair of brackets. The values that we want to pass to the function are listed inside these brackets. A standard function call with two inputs and no output looks like so:

```
FunctionName(input1, input 2);
```

If you want to read more about JavaScript functions in more detail, check out this resource created by Mozilla:

- <https://developer.mozilla.org/en-US/docs/Web/JavaScript/Guide/Functions>

In this subsystem, all of the functions that we need to solve our problem have been defined for us. These two functions are `LeftWheel()` and `RightWheel()`.

We can call as many functions as we like, and they will run in order from top-to-bottom, but don't forget to add a semicolon (;) at the end of each line.

LeftWheel(speed)

The `LeftWheel()` function tells the line following robot to start turning its left wheel at the speed given between the brackets.

A positive input rotates the wheel forward, while a negative input rotates the wheel backward. The largest magnitude for the speed of the wheel is 1. The range of possible speeds is therefore -1 to 1.

An input of zero stops the wheel.

RightWheel(speed)

The `RightWheel()` function operates the same as the `LeftWheel()` function but for the right wheel.