TOOL: https://www.programiz.com/javascript/online-compiler/

JavaScript (often abbreviated as JS) is a high-level, interpreted scripting language that's part of the core technologies of the web, alongside HTML and CSS. So far, we have studied HTML + CSS, and now, we are going to understand the logic and algorithms behind the website
- HTML defines the structure of the web page.
- CSS controls the visual styling.
- JavaScript makes the page interactive and dynamic.

This is a basic example of code:

```html
<!DOCTYPE html>
<html lang="en">
<head>
  <meta charset="UTF-8">
  <title>My First JavaScript Program</title>
</head>
<body>
  <h1>Hello, World!</h1>
  <p>Click the button to see JavaScript in action:</p>
  <button onclick="sayHello()">Click me!</button>

  <script>
    function sayHello() {
      alert("Hello from JavaScript!");
    }
  </script>
</body>
</html>
```
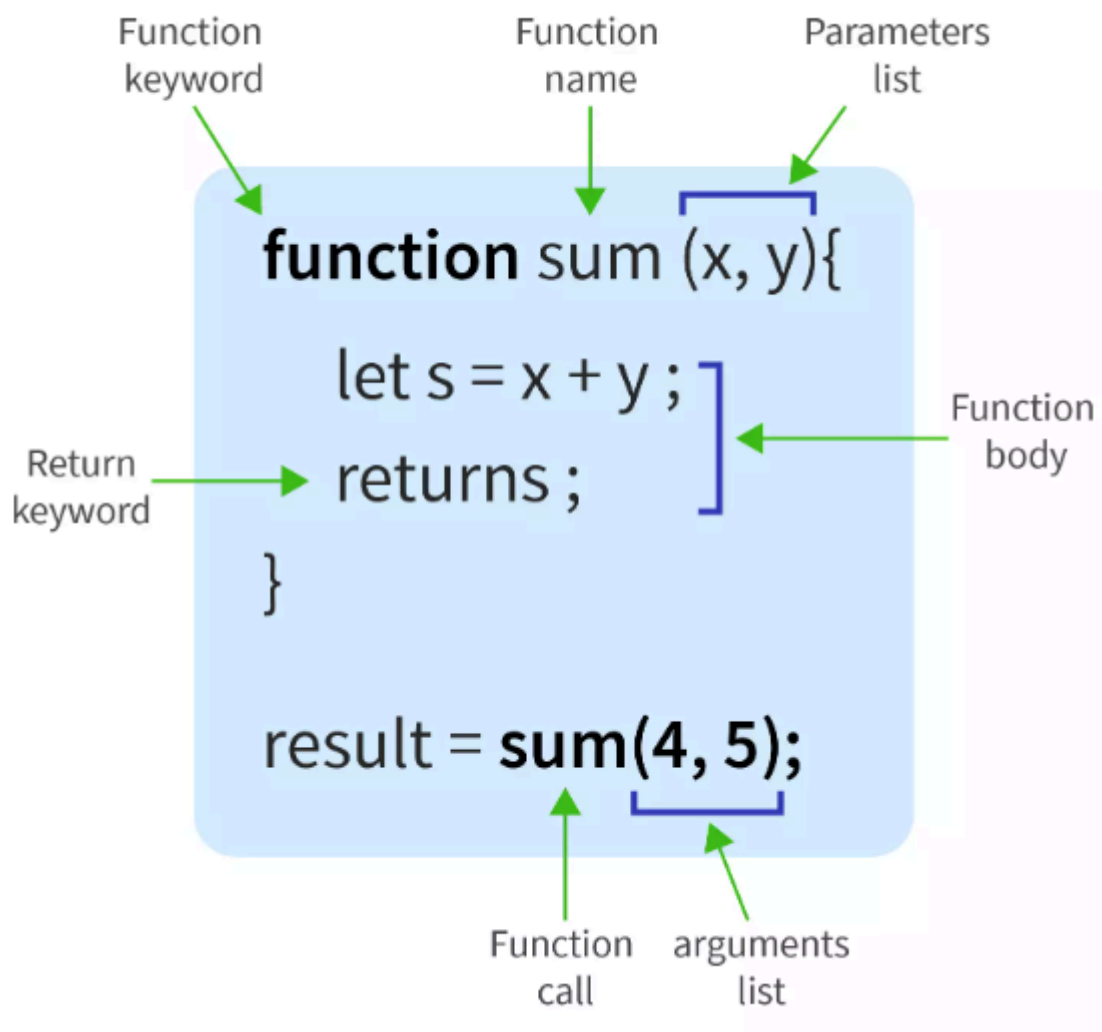
VARIABLES AND CONSTANTS

Variables are used to store data, like text, numbers… Vars can be named **VAR** and **LET**

```javascript
let name = "James";
const age = 25;
var isStudent = true;
```

- `let` is used to declare variables that can be updated.
- `const` is used for values that shouldn't change.
- `var` is an older way to declare variables, but `let` and `const` are preferred today.

Variables can be changed and manipulated, constants cannot.

FUNCTIONS

Functions are blocks of code designed to perform a task and can be reused throughout your code.

```
function greet(name) {
    return "Hello, " + name + "!";
}
```

```
var greeting = greet("Alice"); // "Hello, Alice!"
console.log(greeting);
```

In this example, `greet` is a function that takes a `name` parameter and returns a greeting. The `console.log()` function **outputs data to the console.**

EXERCISE 1 - **Write a JavaScript function that sums two numbers and displays the result.**

EXERCISE 2 - **Write a JavaScript program that displays a greeting message with the user nam**