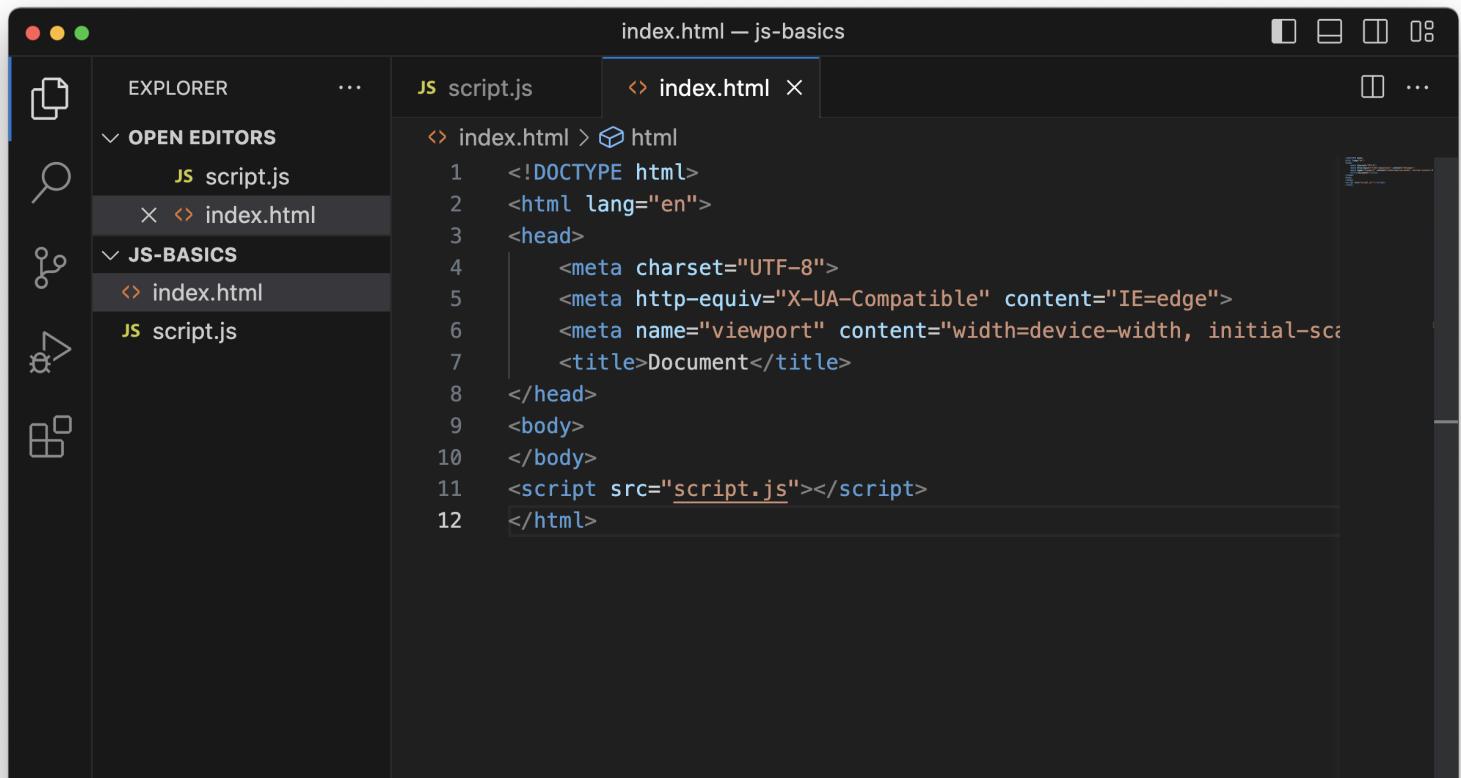


JavaScript Basics

- Link JavaScript files in HTML:

1. After the </body> closing tag and before </html> closing tag



The screenshot shows the Visual Studio Code interface with the following details:

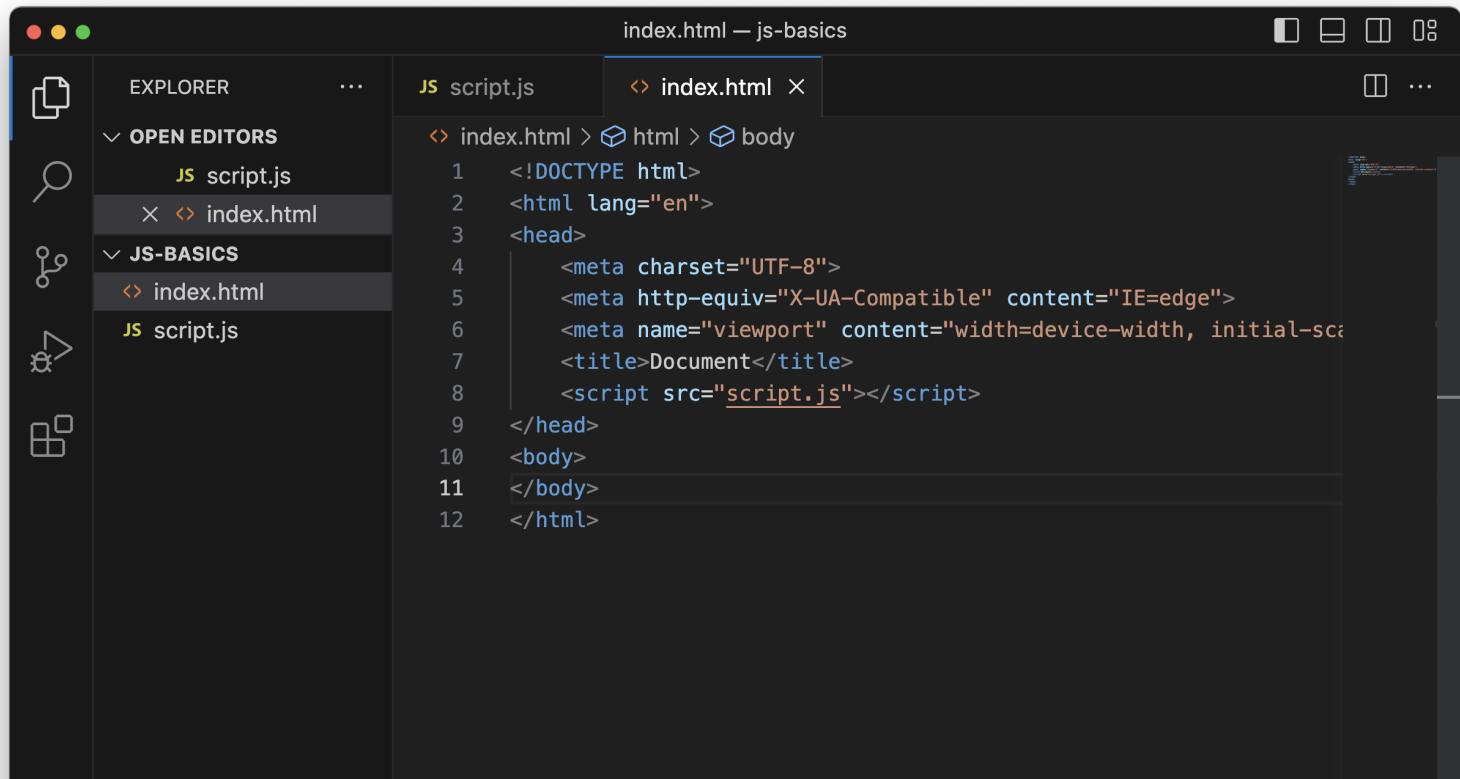
- Title Bar:** index.html — js-basics
- File Explorer (Left):** Shows two files: "script.js" and "index.html". "index.html" is currently selected.
- Code Editor (Center):** Displays the HTML code for "index.html". The script tag at the bottom is highlighted with a red underline, indicating it's being edited.
- Bottom Status Bar:** Shows the current file path: /Users/.../js-basics/index.html

```
<!DOCTYPE html>
<html lang="en">
<head>
    <meta charset="UTF-8">
    <meta http-equiv="X-UA-Compatible" content="IE=edge">
    <meta name="viewport" content="width=device-width, initial-scale=1.0">
    <title>Document</title>
</head>
<body>
</body>
<script src="script.js"></script>
</html>
```

JavaScript Basics

- Link JavaScript files in HTML:

2. Inside <head></head> tags



The screenshot shows the Visual Studio Code interface with the following details:

- Title Bar:** index.html — js-basics
- Left Sidebar (Explorer):** Shows the project structure with files script.js and index.html.
- Central Area:** The editor displays the content of index.html. The code includes meta tags for charset and http-equiv, a title, and a script tag linking to script.js.

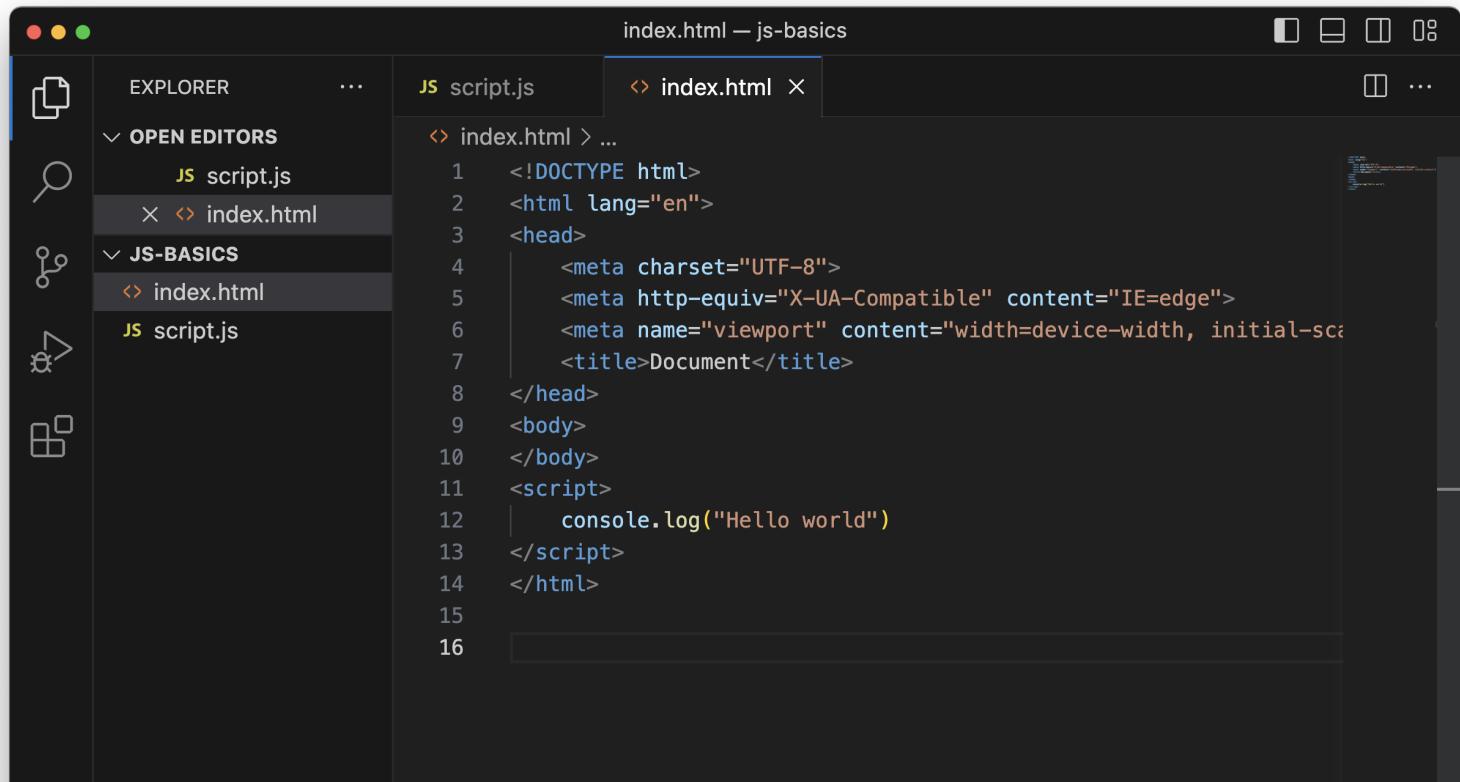
```
<!DOCTYPE html>
<html lang="en">
<head>
    <meta charset="UTF-8">
    <meta http-equiv="X-UA-Compatible" content="IE=edge">
    <meta name="viewport" content="width=device-width, initial-scale=1.0">
    <title>Document</title>
    <script src="script.js"></script>
</head>
<body>
</body>
</html>
```

- Right Sidebar:** Standard VS Code icons for file operations like copy, paste, and search.

JavaScript Basics

- Link JavaScript files in HTML:

3. Similar to using `<style></style>` tags to write internal CSS in HTML files, `<script></script>` can be used to write JavaScript directly in HTML too.



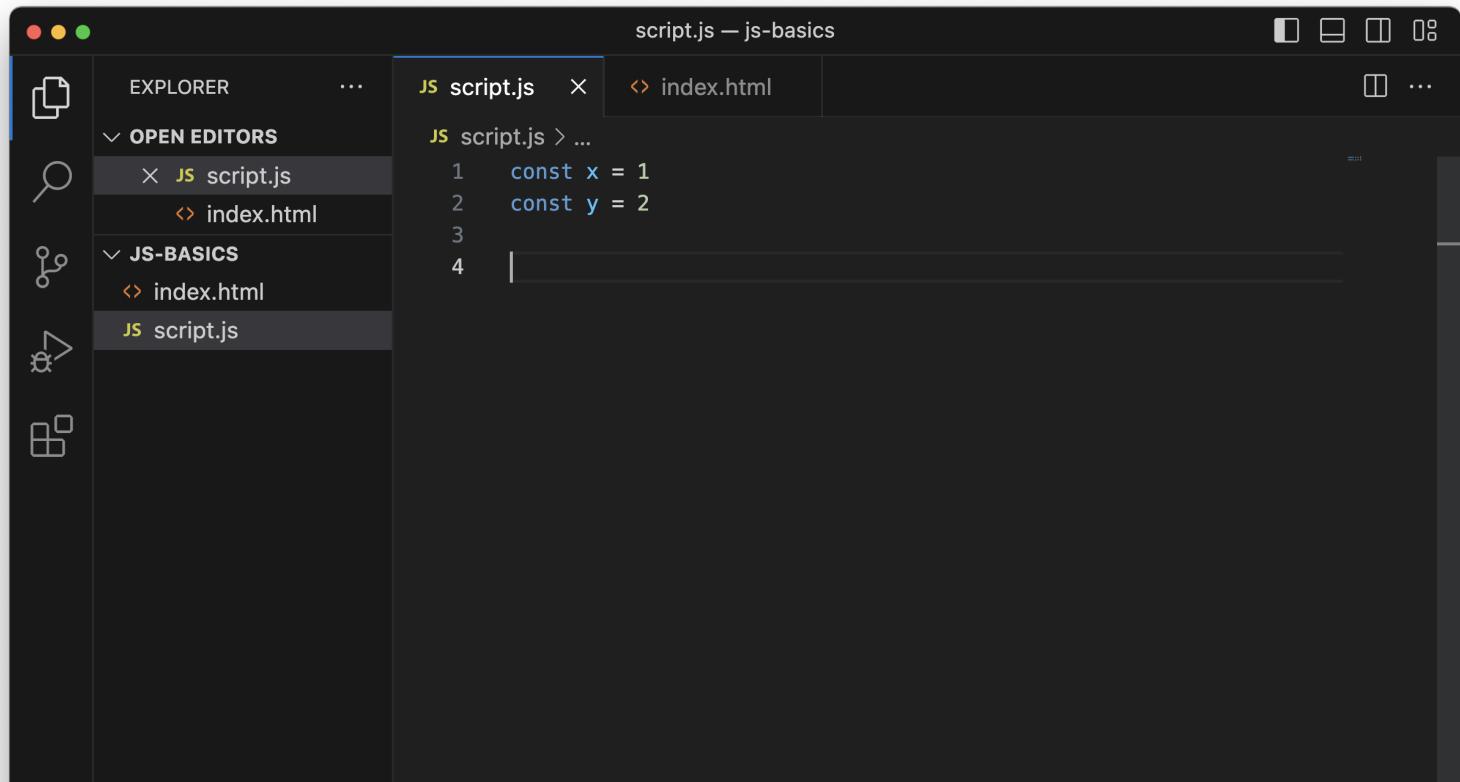
The screenshot shows a code editor interface with the following details:

- File Explorer:** On the left, it lists two files: "script.js" and "index.html".
- Editor Area:** The main area displays the content of "index.html".
- Code Content:**

```
1  <!DOCTYPE html>
2  <html lang="en">
3  <head>
4      <meta charset="UTF-8">
5      <meta http-equiv="X-UA-Compatible" content="IE=edge">
6      <meta name="viewport" content="width=device-width, initial-scale=1.0">
7      <title>Document</title>
8  </head>
9  <body>
10 </body>
11 <script>
12     console.log("Hello world")
13 </script>
14 </html>
```
- Toolbars and Status Bar:** The top bar includes standard window controls (minimize, maximize, close) and a status bar on the right.

JavaScript Basics

- Variables: const, let, var*

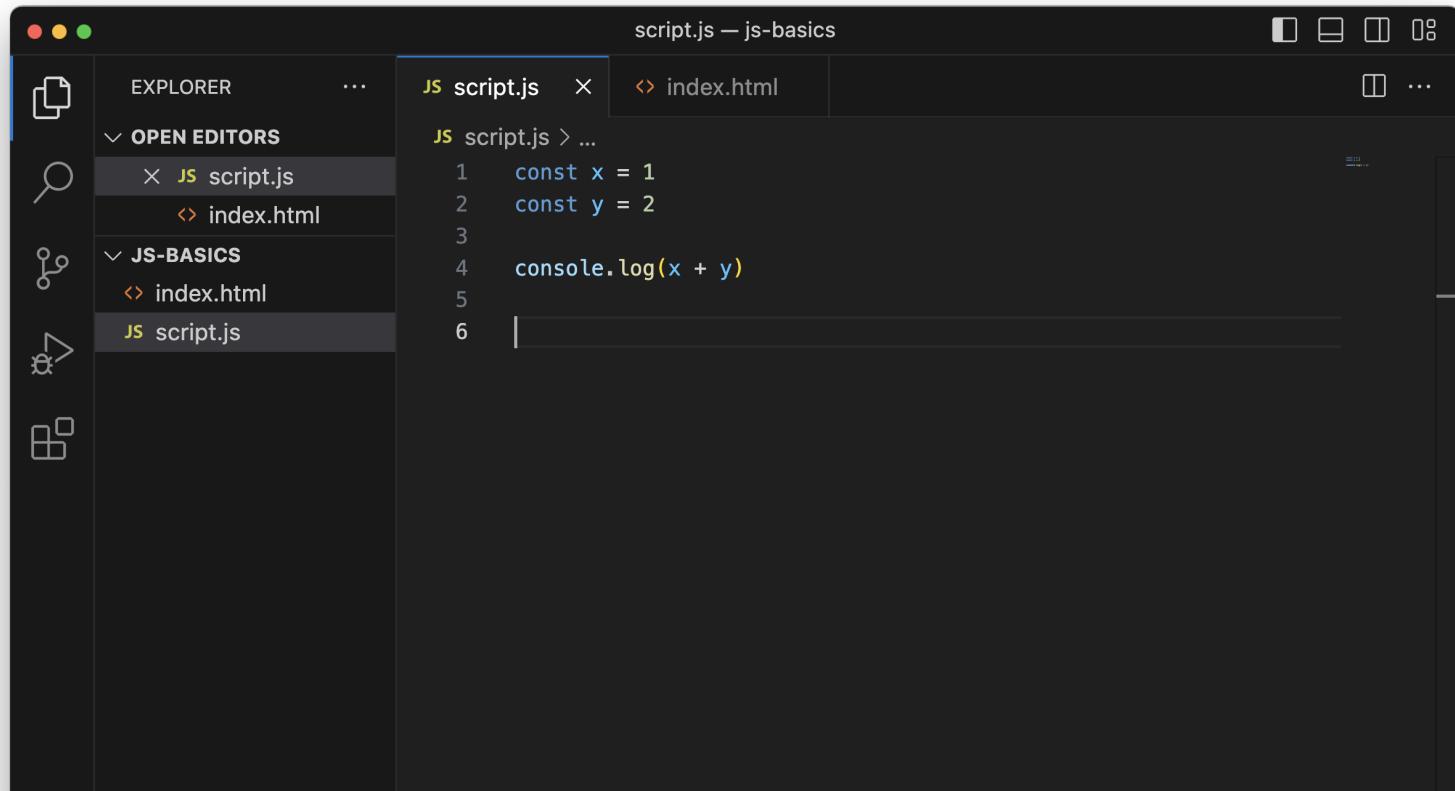


The screenshot shows a dark-themed instance of the Visual Studio Code (VS Code) code editor. The title bar reads "script.js — js-basics". The left sidebar contains icons for Explorer, Search, Problems, and File Explorer. The "OPEN EDITORS" section lists "script.js" and "index.html". The "JS-BASICS" section also lists "index.html" and "script.js". The main editor area displays the following code:

```
1  const x = 1
2  const y = 2
3
4
```

JavaScript Basics

- Variables: const, let, var*

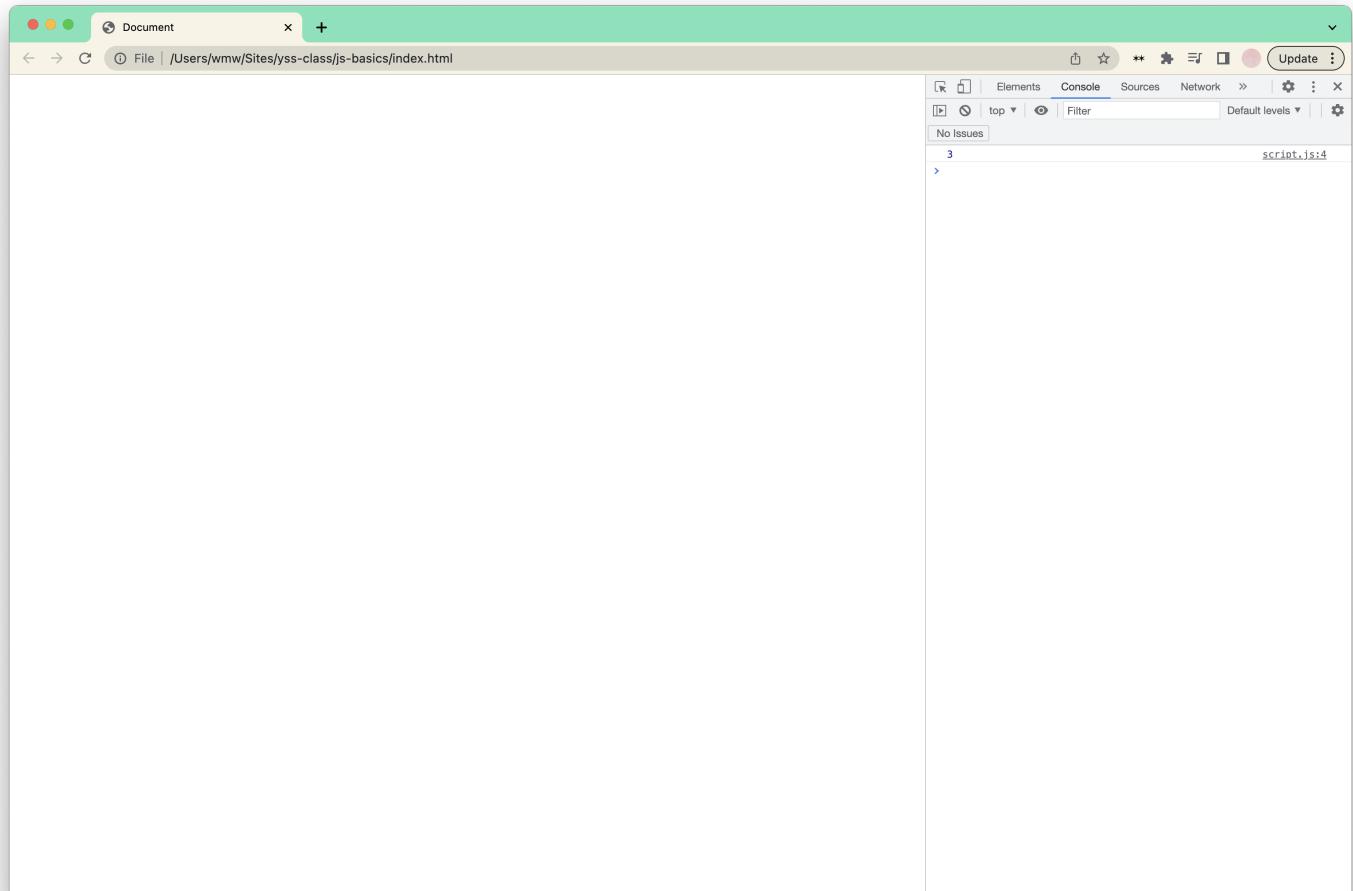


A screenshot of the Visual Studio Code (VS Code) interface. The title bar shows "script.js — js-basics". The left sidebar has icons for Explorer, Search, Symbols, and Issues. The "OPEN EDITORS" section shows "script.js" and "index.html" under "OPEN EDITORS" and "JS-BASICS". The main editor area contains the following code:

```
1  const x = 1
2  const y = 2
3
4  console.log(x + y)
5
6  |
```

JavaScript Basics

- JavaScript Console



JavaScript Basics

- Variables: const, let, var*
- Data types: number, string, boolean, null, undefined...

The screenshot shows the Visual Studio Code interface with a dark theme. The left sidebar contains icons for Explorer, Search, Problems, and File Explorer. The File Explorer section titled 'OPEN EDITORS' shows two entries: 'script.js' and 'index.html'. Below it, a folder named 'JS-BASICS' contains 'index.html' and 'script.js', with 'script.js' also being listed under 'OPEN EDITORS'. The main editor area has a title bar 'script.js — js-basics' and a status bar 'script.js 100%'. The code in the editor is:

```
1 let foo = 42; // foo is now a number
2 foo = "bar"; // foo is now a string
3 foo = true; // foo is now a boolean
```

JavaScript Basics

- Variables: const, let, var*
- Data types: number, string, boolean, null, undefined...

[https://developer.mozilla.org/en-US/
docs/Web/JavaScript/Data_structures](https://developer.mozilla.org/en-US/docs/Web/JavaScript/Data_structures)

JavaScript Basics

- Variables: const, let, var*
- Data types: number, string, boolean, null, undefined...

```
const x = 1  
const y = 2
```

```
console.log(x + y) ----- ?  
console.log("x" + "y") ----- ?
```

```
const x = "1"  
const y = "2"
```

```
console.log(x + y) ----- ?
```

JavaScript Basics

- Variables: const, let, var*
- Data types: number, string, boolean, null, undefined...

```
const x = 1  
const y = 2
```

```
console.log(x + y) ----- 3  
console.log("x" + "y") ----- xy
```

```
const x = "1"  
const y = "2"
```

```
console.log(x + y) ----- 12
```

JavaScript Basics

- Functions

```
const x = 1
const y = 2

function addition() {
  console.log(x + y)
}
```

named function

```
const x = 1
const y = 2

const addition = function() {
  console.log(x + y)
}
```

anonymous function

JavaScript Basics

- Functions

The defined functions won't execute until you CALL it.

```
const x = 1
const y = 2

function addition() {
  console.log(x + y)
}

// Call the function
addition()
```

```
const x = 1
const y = 2

const addition = function() {
  console.log(x + y)
}

// Call the function
addition()
```

JavaScript Basics

- Selectors

The screenshot shows a code editor interface with two tabs: "index.html" and "script.js".

index.html:

```
<!DOCTYPE html>
<html lang="en">
  <head>
    <meta charset="UTF-8">
    <meta name="viewport" content="width=device-width, initial-scale=1.0">
    <title>Document</title>
  </head>
  <body>
    <p>Hello world</p>
  </body>
  <script src="script.js"></script>
</html>
```

script.js:

```
document.querySelector("p").style.color = "red"
```

JavaScript Basics

- Event listener

“click”

“mouseover”

“mouseout”

“keyup”

JavaScript Basics

- Event listener

“click”

“mouseover”

“mouseout”

“keyup”

“scroll”

“resize”

“dblclick”

“keydown”

“play”

“transitionend”

“submit”

.....