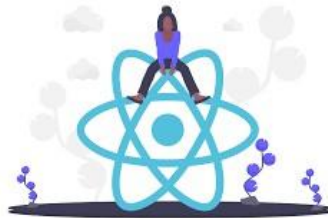


W1 PRACTICE

QUIZ APP



Lab1.1:

The Selector check

```
<h1 id="main-title">Hello World</h1>  
<button id="change-btn">Change Title</button>
```

Todo:

1. Select the `h1` and the `button` using JavaScript.
2. Add a click event listener to the button.
3. When clicked, change the text of the `h1` to "Javascript is fun!".

lab1.1.html X



LAB_w1 > lab1.1.html > html

```
1  <!DOCTYPE html>
2  <html lang="en">
3  <head>
4    <meta charset="UTF-8">
5    <meta name="viewport" content="width=device-width, initial-scale=
6    <title>Document</title>
7  </head>
8  <body>
9    <h1 id="main-title">Hello World</h1>
10   <button id="change-btn">Change Title</button>
11 </body>
12 <script>
13   const title = document.getElementById('main-title');
14   const button = document.getElementById('change-btn');
15
16   button.addEventListener('click', () => {
17     title.textContent = 'JavaScript is Fun!';
18   });
19 </script>
20 </html>
```



Document

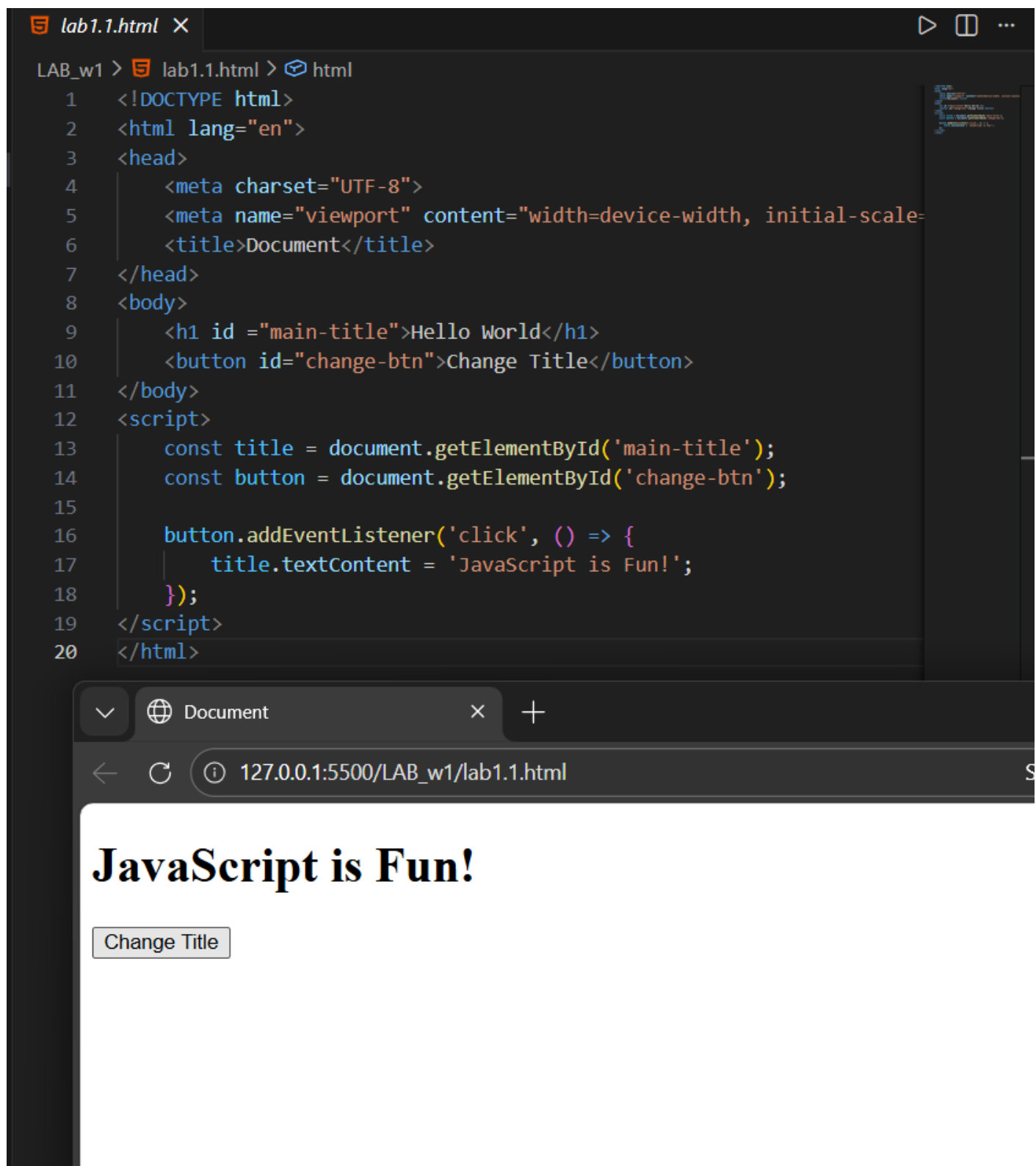


127.0.0.1:5500/LAB_w1/lab1.1.html

S

Hello World

Change Title



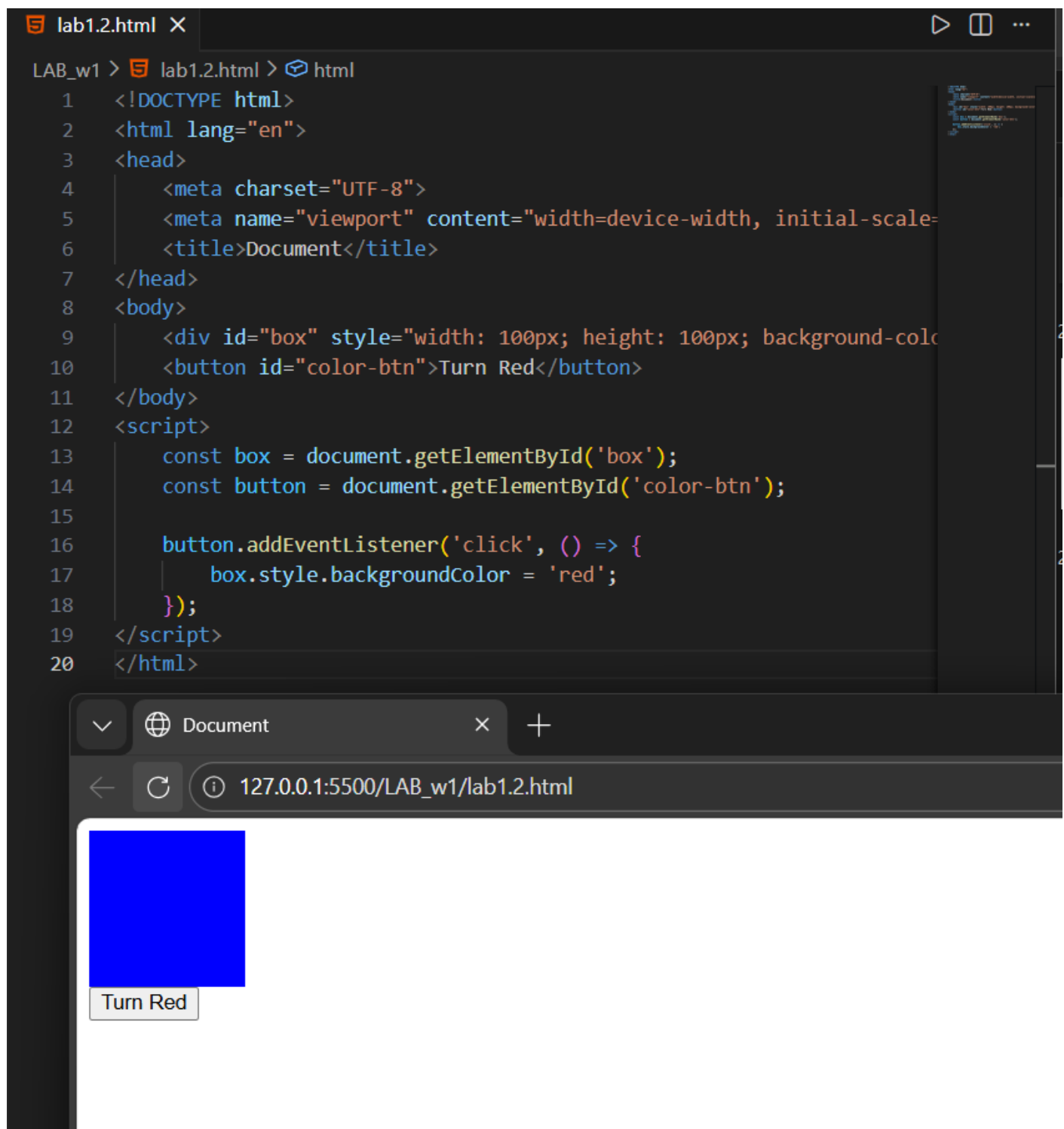
Lab1.2:

Style Manipulation

```
<div id="box" style="width: 100px; height: 100px; background-color: ■blue;"></div>  
<button id="color-btn">Turn Red</button>
```

Todo:

1. When the button is clicked, change the background color of the box to "red".
2. Make it toggle. If it is red, turn it back to blue, and vice versa.



lab1.2.html X



LAB_w1 > lab1.2.html > html

```
1 <!DOCTYPE html>
2 <html lang="en">
3 <head>
4   <meta charset="UTF-8">
5   <meta name="viewport" content="width=device-width, initial-scale=1">
6   <title>Document</title>
7 </head>
8 <body>
9   <div id="box" style="width: 100px; height: 100px; background-color: #ccc;">
10    <button id="color-btn">Turn Red</button>
11  </div>
12 <script>
13   const box = document.getElementById('box');
14   const button = document.getElementById('color-btn');
15
16   button.addEventListener('click', () => {
17     box.style.backgroundColor = 'red';
18   });
19 </script>
20 </html>
```



Document



127.0.0.1:5500/LAB_w1/lab1.2.html

Source



Turn Red

Lab1.3

Input Handling

```
<input type="text" id="username" placeholder="Enter name">  
<button id="greet-btn">Greet</button>  
<p id="message"></p>
```

Todo:

1. When the button is clicked, get the value typed into the input field.
2. Display "Hello, [Name]!" inside the `<p id="message">`.
3. If the input is empty, display "Please enter a name" in red color.

lab1.3.html X

LAB_w1 > lab1.3.html > html > script

```
1 <!DOCTYPE html>
2 <html lang="en">
3 <head>
4   <meta charset="UTF-8">
5   <meta name="viewport" content="width=device-width, initial-scale=1">
6   <title>Document</title>
7 </head>
8 <body>
9   <input type="text" id="username" placeholder="Enter name">
10  <button id="greet-btn">Greet </button>
11  <p id="message"></p>
12 </body>
13 <script>
14   const nameInput = document.getElementById('username');
15   const greetBtn = document.getElementById('greet-btn');
16   const message = document.getElementById('message');
17
18   greetBtn.addEventListener('click', () => {
19     const name = nameInput.value;
20     message.textContent = `Hello, ${name}!`;
21   });
22
23
```

Document

127.0.0.1:5500/LAB_w1/lab1.3.html

Hello, BooRei!

Lab1.4

The Counter (Data Driven)

```
<h2 id="counter-view">0</h2>
<button id="inc-btn">+1</button>
```

Todo:

1. Create a Javascript variable `let count = 0;` (This is your **Data**).
2. Create a function `render()` that updates `counter-view` with the value of `count`.
3. When the button is clicked:
 - Update the variable (`count++`).
 - Call `render()` to update the UI.
 - *Do NOT change the DOM directly inside the event listener.*

lab1.4.html X

LAB_w1 > lab1.4.html > html

```
1 <!DOCTYPE html>
2 <html lang="en">
3 <head>
4   <meta charset="UTF-8">
5   <meta name="viewport" content="width=device-width, initial-scale=1">
6   <title>Document</title>
7 </head>
8 <body>
9   <h2 id="counter-view">0</h2>
10  <button id="inc-btn">+1</button>
11 </body>
12 <script>
13   const counterView = document.getElementById('counter-view');
14   const incBtn = document.getElementById('inc-btn');
15
16   incBtn.addEventListener('click', () => {
17     counterView.textContent = parseInt(counterView.textContent) + 1;
18   });
19 </script>
20 </html>
```

Document X +

127.0.0.1:5500/LAB_w1/lab1.4.html

3

+1

Lab1.5

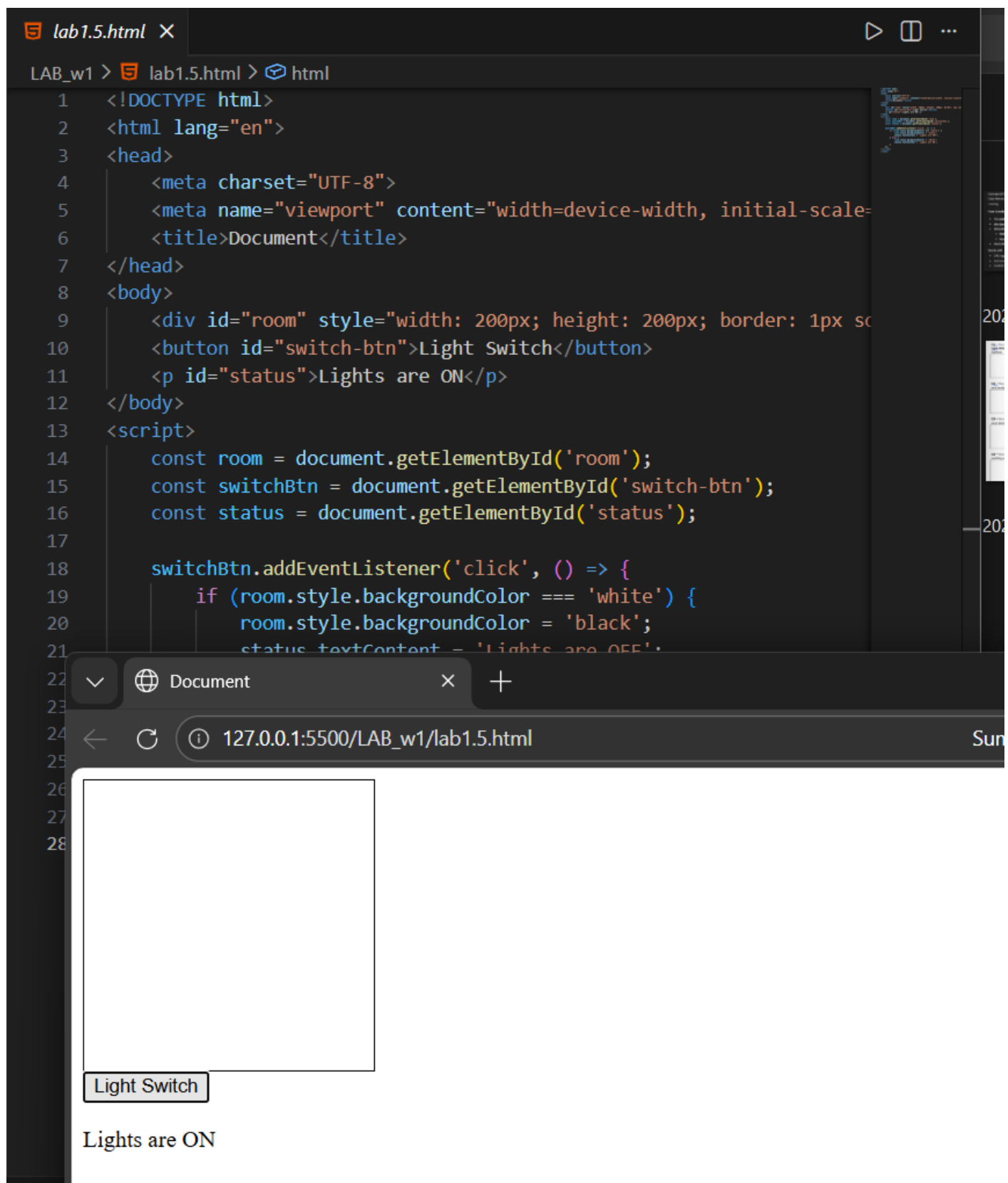
The Light Switch (Boolean Logic)

```
<div id="room" style="width: 200px; height: 200px;
border: 1px solid ■black; background-color: □white;"
></div>

<button id="switch-btn">Light Switch</button>
<p id="status-text">Lights are ON</p>
```

Todo:

1. Create a variable `let isLightOn = true;.`
2. Create a `render()` function:
 - If `isLightOn` is true: set box background to white, text to "Lights are ON".
 - If `isLightOn` is false: set box background to black, text to "Lights are OFF".
3. On button click: toggle the variable (`isLightOn = !isLightOn`) and call `render()`.



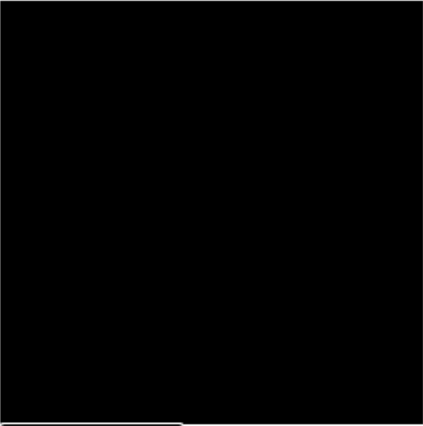
lab1.5.html X

LAB_w1 > lab1.5.html > html

```
1 <!DOCTYPE html>
2 <html lang="en">
3 <head>
4   <meta charset="UTF-8">
5   <meta name="viewport" content="width=device-width, initial-scale=1">
6   <title>Document</title>
7 </head>
8 <body>
9   <div id="room" style="width: 200px; height: 200px; border: 1px solid black; background-color: white;">
10     <button id="switch-btn">Light Switch</button>
11     <p id="status">Lights are ON</p>
12   </div>
13 <script>
14   const room = document.getElementById('room');
15   const switchBtn = document.getElementById('switch-btn');
16   const status = document.getElementById('status');
17
18   switchBtn.addEventListener('click', () => {
19     if (room.style.backgroundColor === 'white') {
20       room.style.backgroundColor = 'black';
21       status.textContent = 'Lights are OFF';
22     } else {
23       room.style.backgroundColor = 'white';
24       status.textContent = 'Lights are ON';
25     }
26   });
27 </script>
28 </body>
</html>
```

Document

127.0.0.1:5500/LAB_w1/lab1.5.html



Light Switch

Lights are OFF

Lab1.6

Simple Object Rendering

```
<div id="card">
  <h3 id="user-name"></h3>
  <p id="user-role"></p>
</div>
<button id="promote-btn">Promote to Admin</button>
```

Todo:

1. Create a data object: `let user = { name: "Sok", role: "Student" };`
2. Create a `render()` function that puts the user's name and role into the HTML elements.
3. When the "Promote" button is clicked:
 - o Change `user.role` to "Admin".
 - o Call `render()`.

lab1.6.html X



LAB_w1 > lab1.6.html > html > script > promoteBtn.addEventListener('click') callback

```
2 <html lang="en">
3 <head>
4
5   <meta name="viewport" content="width=device-width, initial-scale=1">
6   <title>Document</title>
7 </head>
8 <body>
9   <div id="card">
10     <h3 id="username"></h3>
11     <p id="user-role"></p>
12   </div>
13   <button id="promote-btn">Promote to admin</button>
14 </body>
15 <script>
16   let user = {name:"Sok", role: "Student"};
17
18   const card = document.getElementById('card');
19   const username = document.getElementById('username');
20   const userRole = document.getElementById('user-role');
21   const promoteBtn = document.getElementById('promote-btn');
```



Document



127.0.0.1:5500/LAB_w1/lab1.6.html

Sok

Student

Promote to admin



Lab1.7

Rendering a List (Static)

```
<ul id="fruit-list"></ul>
```

Todo:

1. Start with this data: `let fruits = ["Apple", "Banana", "Orange", "Mango"];`
2. Write a function `renderFruits()` that:
 - Clears the current innerHTML of `fruit-list`.
 - Loops through the `fruits` array.
 - For each fruit, creates an `` element.
 - Appends the `` to the ``.
3. Call the function once at the start to display the list.

LAB_w1 > lab1.7.html > html

```
1  <!DOCTYPE html>
2  <html lang="en">
3  <head>
4    <meta charset="UTF-8">
5    <meta name="viewport" content="width=device-width, initial-scale=
6    <title>Document</title>
7  </head>
8  <body>
9    <ul id="fruit-list">
10  </body>
11  <script>
12    let fruits = ['Apple', 'Banana', 'Orange', 'Mango'];
13    const renderFruits = () => {
14      const fruitList = document.getElementById('fruit-list');
15      fruitList.innerHTML = '';
16      fruits.forEach(fruit => {
17        const li = document.createElement('li');
18        li.textContent = fruit;
19        fruitList.appendChild(li);
20      });
21    };
22  </script>
```



Document



127.0.0.1:5500/LAB_w1/lab1.7.html

- Apple
- Banana
- Orange
- Mango

Lab1.8

Adding to a List (Dynamic)

```
<input type="text" id="new-fruit">  
<button id="add-btn">Add Fruit</button>  
<ul id="fruit-list"></ul>
```

Todo:

1. Use the code from Exercise 7.
2. When the "Add Fruit" button is clicked:
 - Get the text from the input.
 - `.push()` the new text into the `fruits` array.
 - Call `renderFruits()`. ○ *Observation: Notice how you don't need to manually create the new DOM element in the click event? The render function handles the whole list.*

lab1.8.html

LAB_w1 > lab1.8.html > html > script

1<!DOCTYPE html>

2<html lang="en">

3<head>

4<meta charset="UTF-8">

5<meta name="viewport" content="width=device-width, initial-scale=1">

6<title>Document</title>

7</head>

8<body>

9<ul id="fruit-list">

10<input type="text" id="new-fruit">

11<button id="add-btn">Add Fruit</button>

12<ul id="fruit-list">

13</body>

14<script>

15let fruits = ['Apple', 'Banana', 'Orange', 'Mango'];

16const fruitList = document.getElementById('fruit-list');

17const newFruitInput = document.getElementById('new-fruit');

18const addBtn = document.getElementById('add-btn');

19

20Windsurf: Refactor | Explain | Generate Function Comment | X

21

22

23Document

24

25127.0.0.1:5500/LAB_w1/lab1.8.html

26

27

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35

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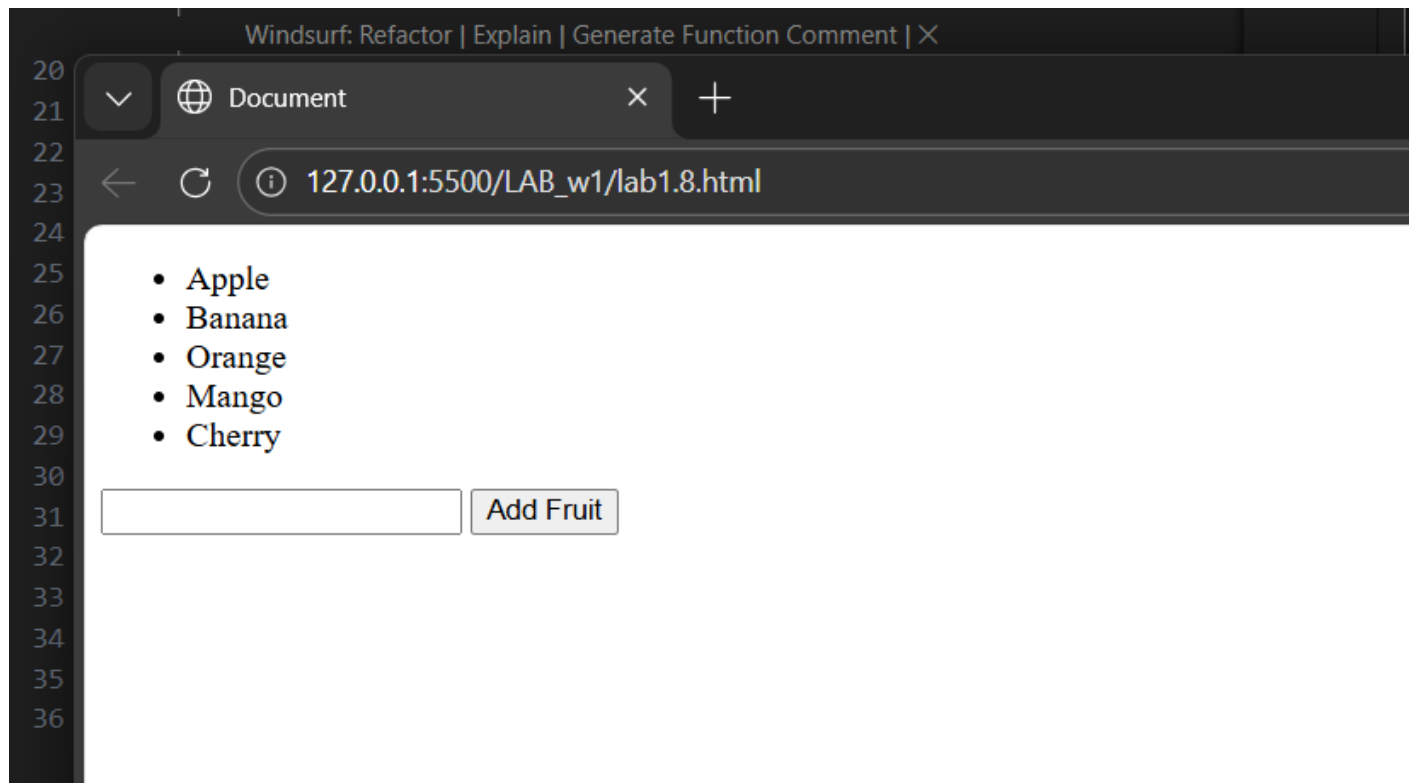
• Apple

• Banana

• Orange

• Mango

Add Fruit



Lab1.9

Smart List (Objects + Style)

```
<div id="tasks-container"></div>
```

Task:

1. Data:

JavaScript

```
let tasks = [  
  { title: "Do Homework", isUrgent: true },  
  { title: "Wash dishes", isUrgent: false } ];
```

2. Create a `renderTasks()` function.
3. Loop through tasks and create `<div>` elements for each.
4. **Logic:** If `isUrgent` is `true`, set the text color to **red**. If `false`, set it to **black**.
5. Append them to the container.

lab1.9.html X

LAB_w1 > lab1.9.html > html

```
2    <html lang="en">
11   <script>
12       let tasks= [
13           { title: 'Do Homework', isUrgent: true },
14           { title: 'Wash Dishes', isUrgent: false }
15       ];
16
17       const tasksContainer = document.getElementById('tasks-container');
18       tasks.forEach(task => {
19           const taskDiv = document.createElement('div');
20           taskDiv.textContent = task.title;
21           if (task.isUrgent) {
22               taskDiv.style.backgroundColor = 'red';
23           }
24           tasksContainer.appendChild(taskDiv);
25       });
26   </script>
27 </html>
```

Document

127.0.0.1:5500/LAB_w1/lab1.9.html

Do Homework

Wash Dishes

Lab1.10

The Search Filter

```
<input type="text" id="search-input" placeholder="Search item...">
<ul id="items-list"></ul>
```

Task:

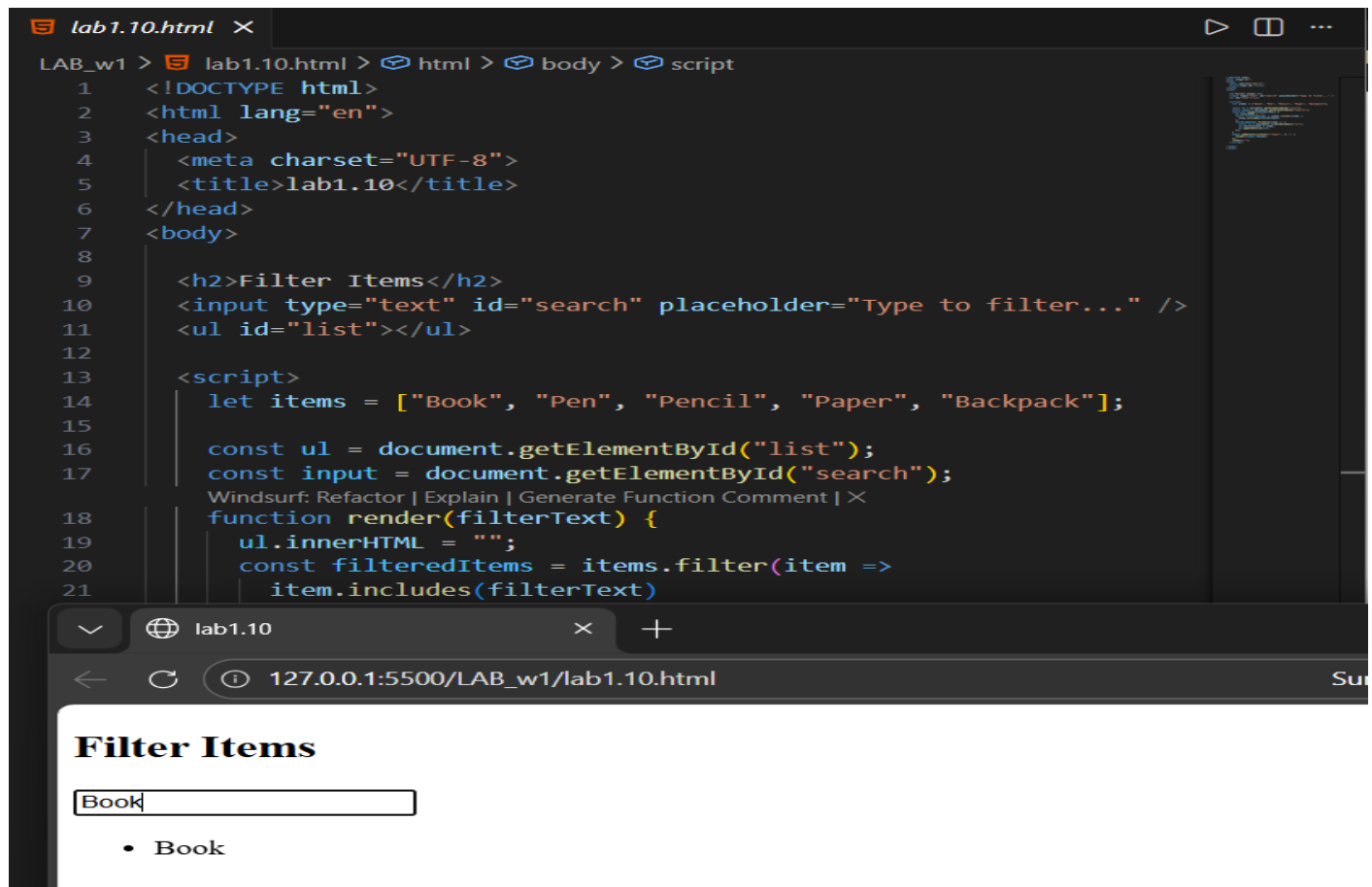
1. Data: `let items = ["Book", "Pen", "Pencil", "Paper", "Backpack"];`
2. Write a function `render(filterText)` that receives a filter argument.
3. Inside the function:
 - o Filter the `items` array so it only contains items that include the `filterText`.
 - o Render the filtered list to the ``.
4. Add an event listener to the input (event type: `input` or `keyup`).
5. On event: Call `render(input.value)`.

The screenshot shows a code editor with the following HTML and JavaScript code:

```
LAB_w1 > lab1.10.html > html > body > script
1  <!DOCTYPE html>
2  <html lang="en">
3  <head>
4    <meta charset="UTF-8">
5    <title>lab1.10</title>
6  </head>
7  <body>
8
9    <h2>Filter Items</h2>
10   <input type="text" id="search" placeholder="Type to filter..." />
11   <ul id="list"></ul>
12
13   <script>
14     let items = ["Book", "Pen", "Pencil", "Paper", "Backpack"];
15
16     const ul = document.getElementById("list");
17     const input = document.getElementById("search");
18     function render(filterText) {
19       ul.innerHTML = "";
20       const filteredItems = items.filter(item =>
21         item.includes(filterText)
```

The browser window shows the rendered page with the title "Filter Items". It features a text input field with the placeholder "Type to filter...". Below the input, a list of items is displayed:

- Book
- Pen
- Pencil
- Paper
- Backpack



===== THE QUIZ APP =====

During this practice you will implement a **QUIZ APP**, following the bellow requirements:

Quiz Player

- Start a quiz
- Answer multiple questions
- Navigate through questions
- See the final score at the end

Quiz Editor

- View all quiz questions
- Edit existing questions
- Add new questions
- (Optional) Delete questions

Navigation

- Switch between views

