

Lesson 04 Demo 04

Working with Functions

Objective: To implement and verify Javascript functions for mathematical operations and temperature conversion within a web application

Tools required: Visual Studio Code

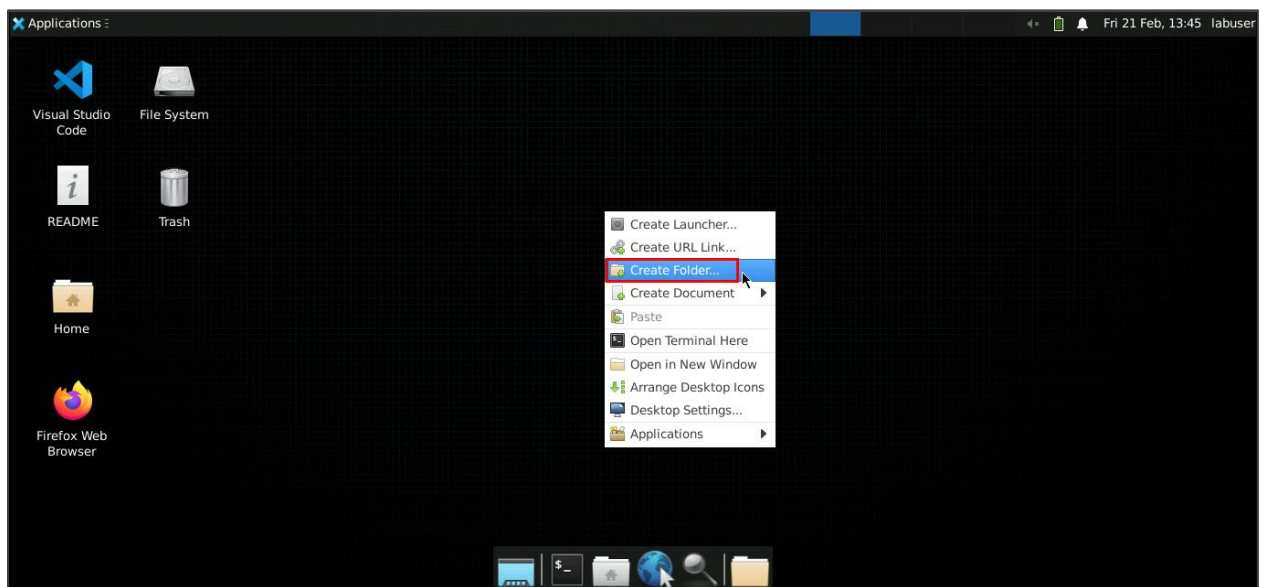
Prerequisites: A basic understanding of functions in Javascript

Steps to be followed:

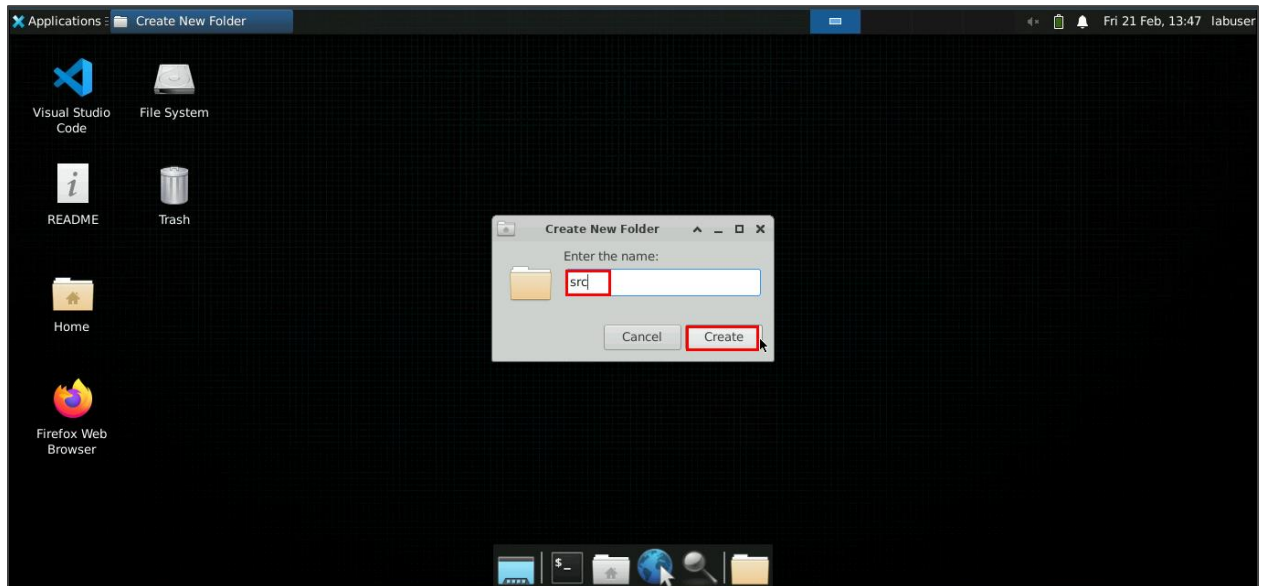
1. Create an index.html file and execute it

Step 1: Create an index.html file and execute it

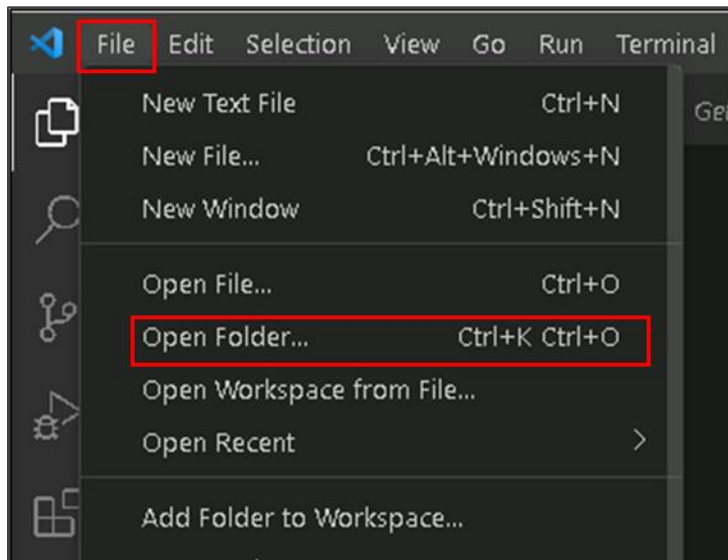
- 1.1 Right-click on the desktop and select **Create Folder...**



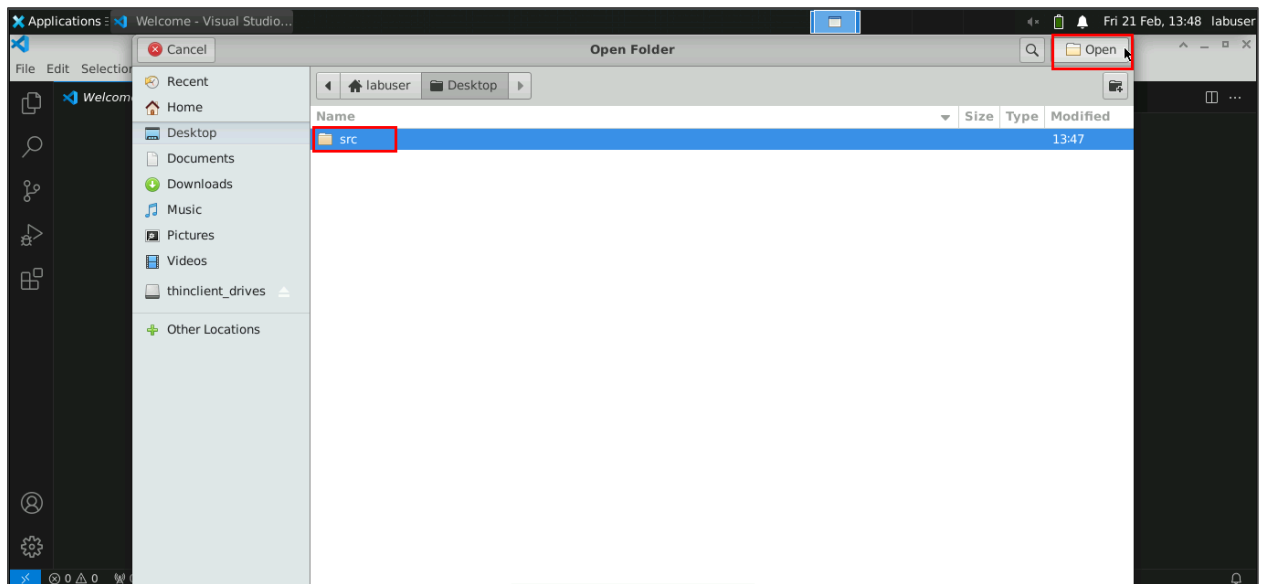
1.2 Enter the folder name as **src** and click on **Create**



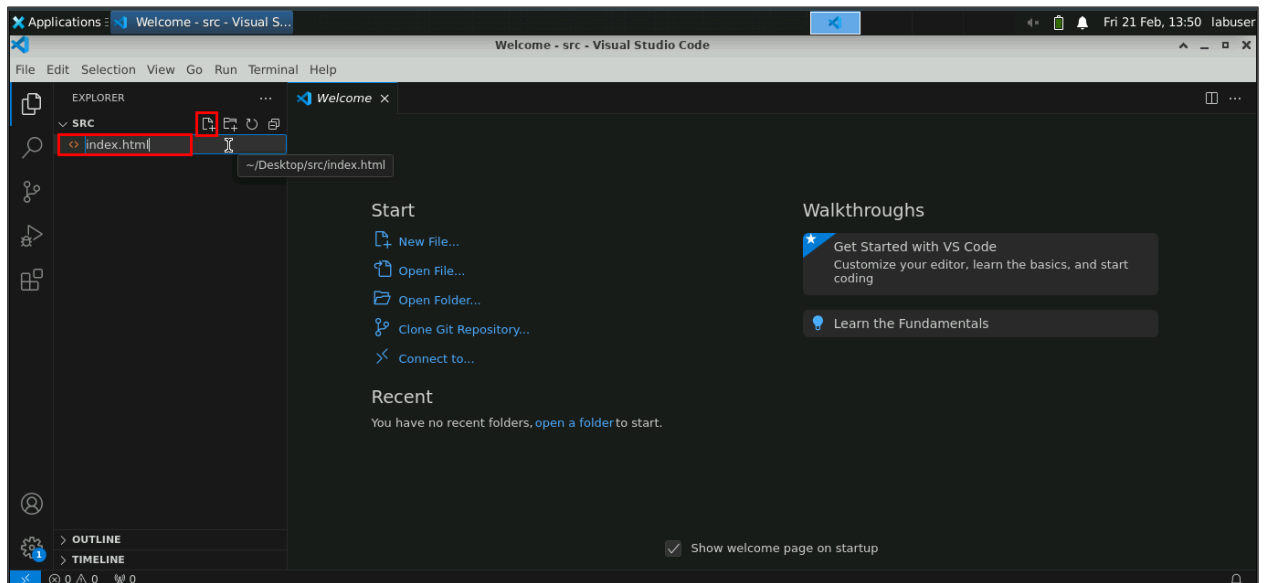
1.3 Open Visual Studio Code, right-click on **File**, and select the **Open Folder...** option



1.4 Select the **src** folder and click on **Open**

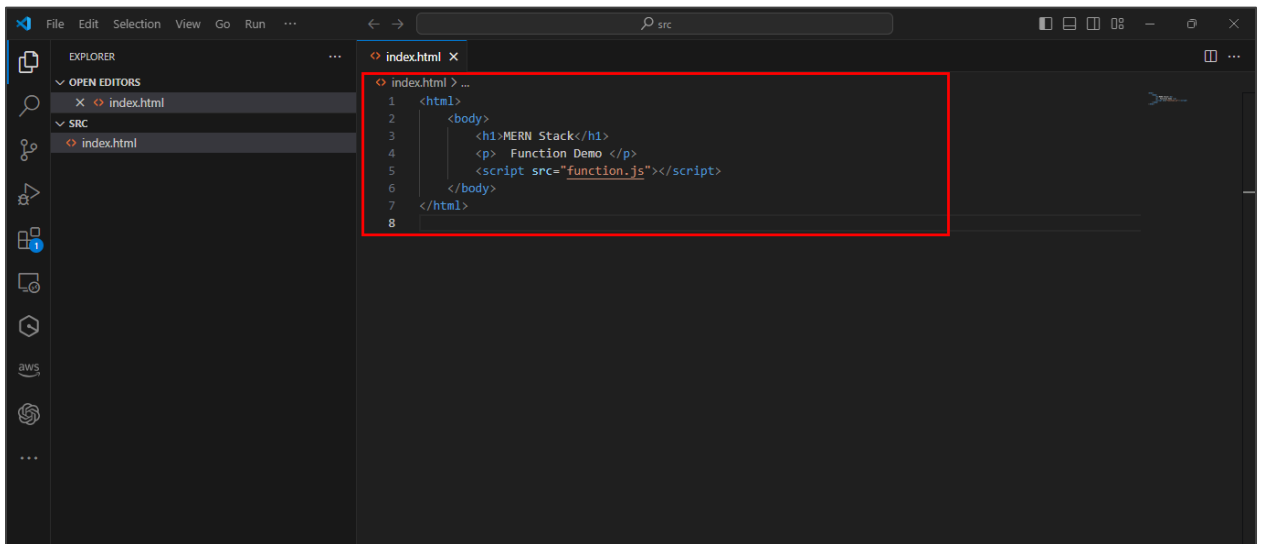


1.5 Select the **src** folder of the project, click the **New File** icon, and enter the filename as **index.html**

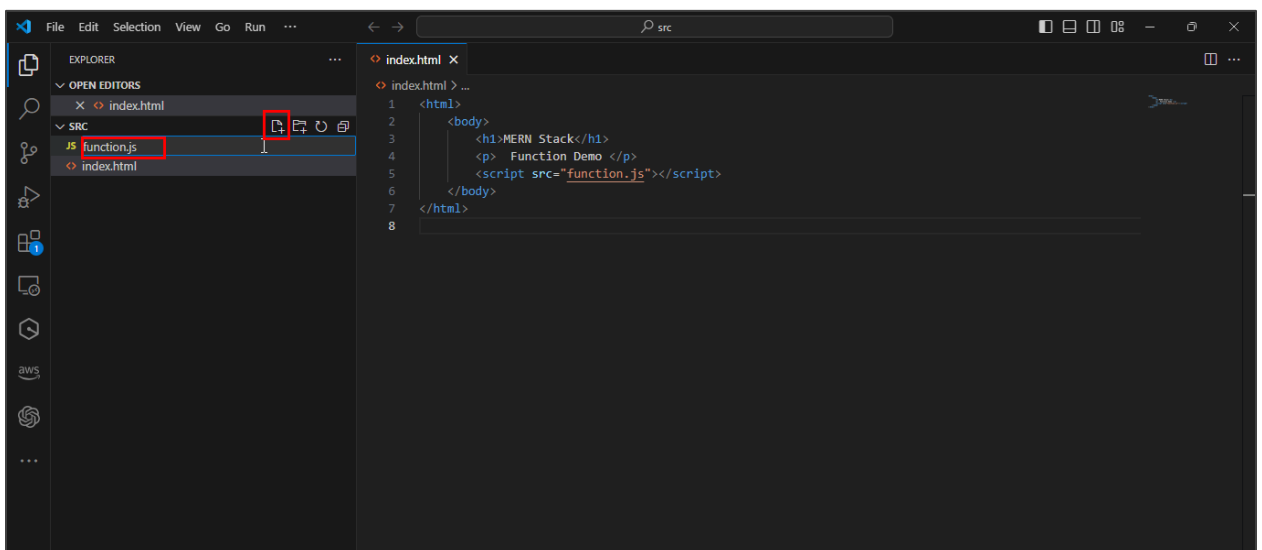


1.6 Add the following code to the index.html file:

```
<html>
  <body>
    <h1>MERN Stack</h1>
    <p> Function Demo </p>
    <script src="function.js"></script>
  </body>
</html>
```



1.7 Right-click on the **src** folder of the project, select the **New File** option, and enter the filename as **function.js**



1.8 Add the following code to the function.js file and press **Ctrl + S** to save it:

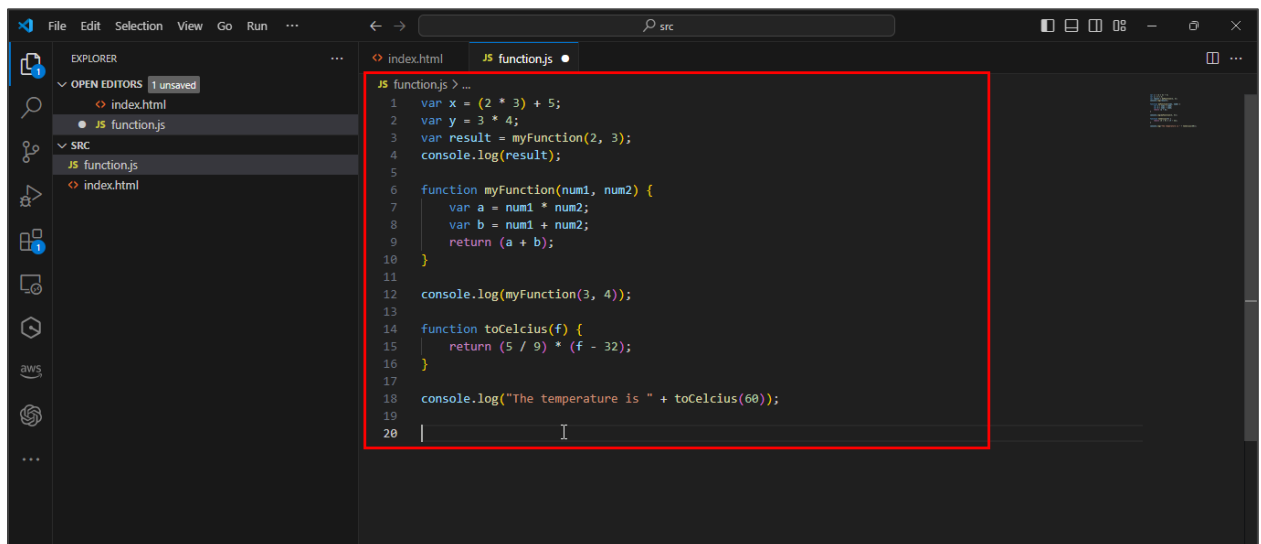
```
var x = (2 * 3) + 5;  
var y = 3 * 4;  
var result = myFunction(2, 3);  
console.log(result);
```

```
function myFunction(num1, num2) {  
    var a = num1 * num2;  
    var b = num1 + num2;  
    return (a + b);  
}
```

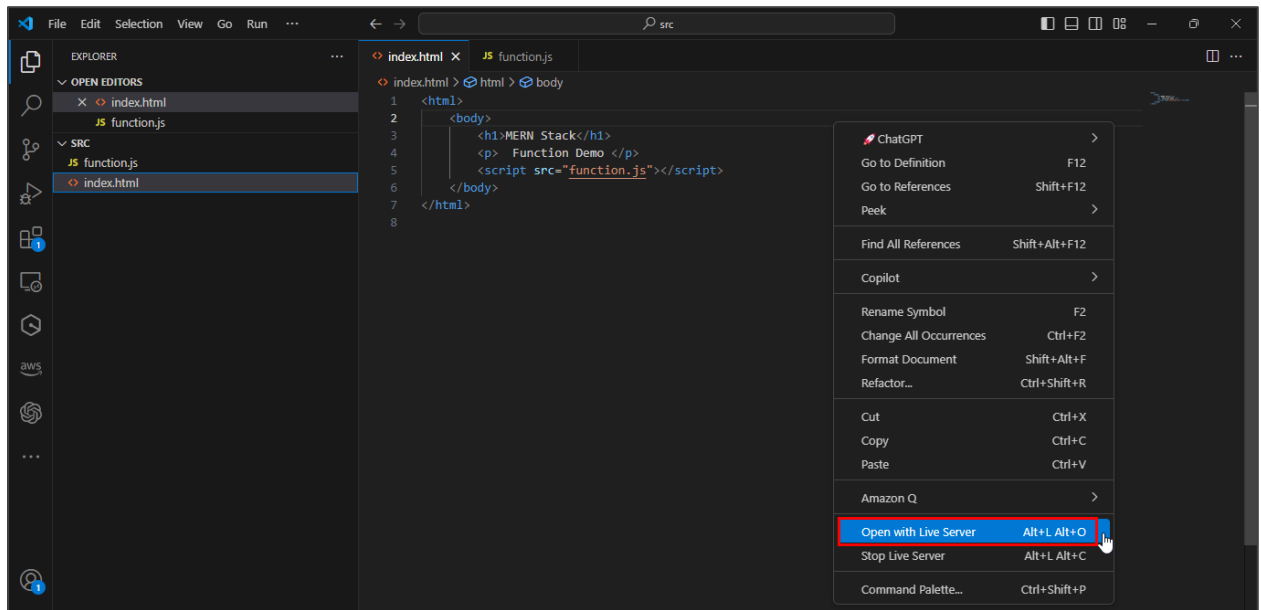
```
console.log(myFunction(3, 4));
```

```
function toCelcius(f) {  
    return (5 / 9) * (f - 32);  
}
```

```
console.log("The temperature is " + toCelcius(60));
```



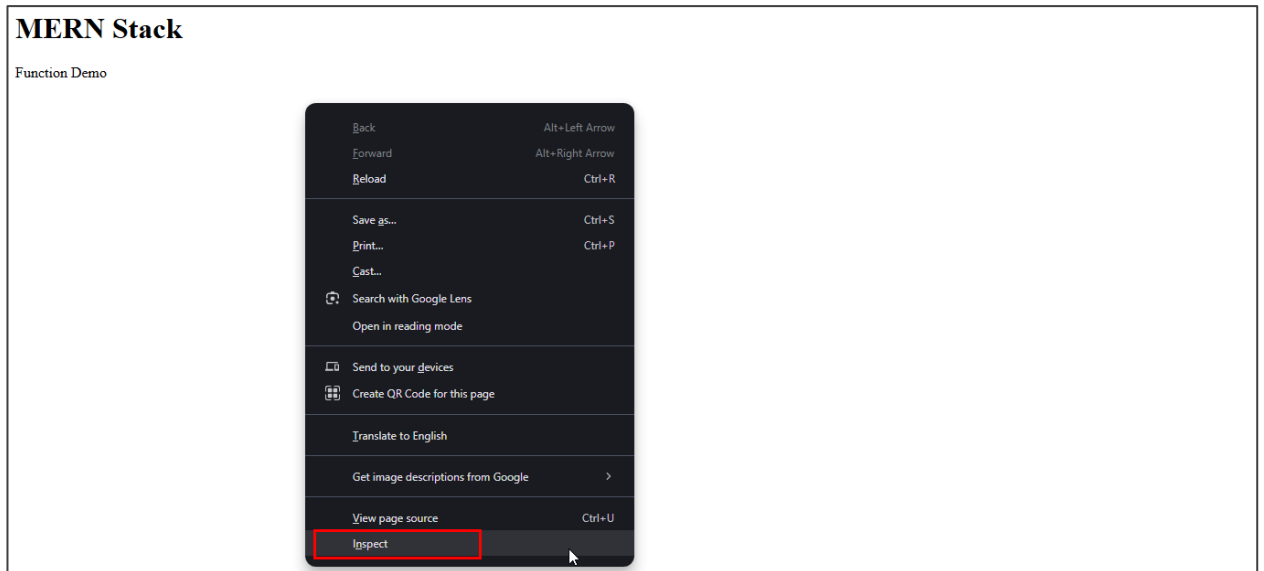
1.9 Right-click on the **index.html** file of the project and select the **Open with Live Server** option



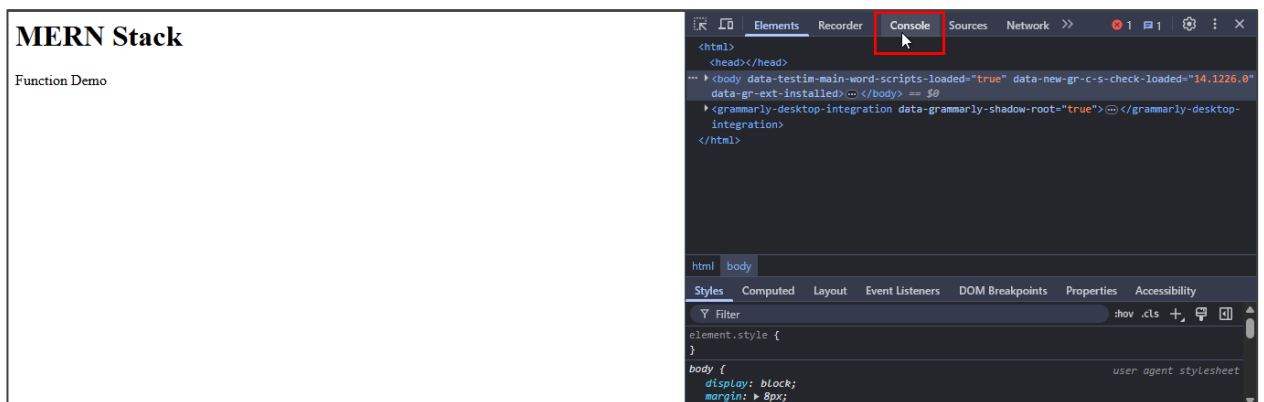
The output is as shown below:



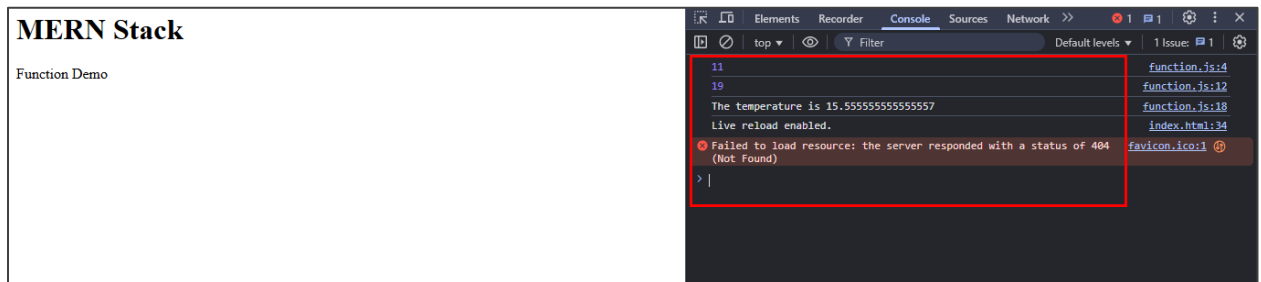
1.10 Right-click and select the **Inspect** option once the server starts running



1.11 Click on the **Console** tab



It displays log messages, errors, and outputs from JavaScript code, helping developers debug and monitor their application's behavior.



The provided code demonstrates a JavaScript program that utilizes functions. It involves creating an HTML file (*index.html*) and a JavaScript file (*function.js*) to showcase function usage, mathematical operations, and temperature conversion, with results logged in the browser console.

By following these steps, you have successfully implemented and validated Javascript functions for mathematical operations and temperature conversion within a web application.