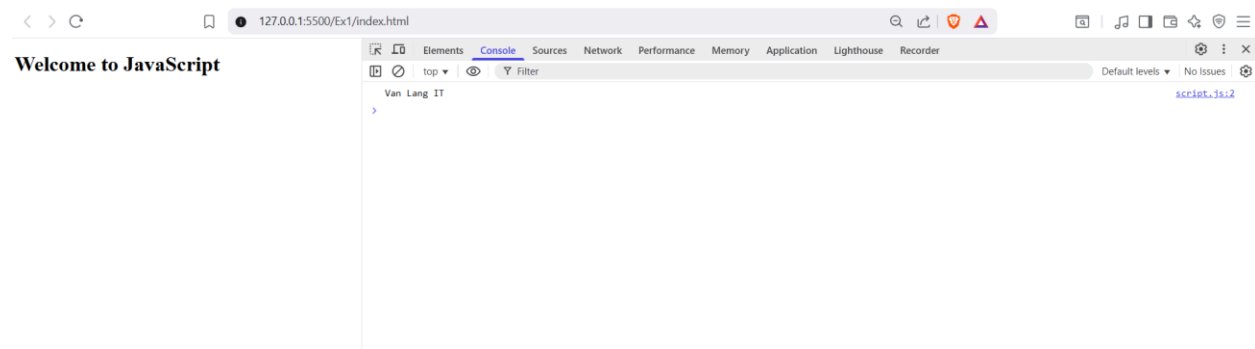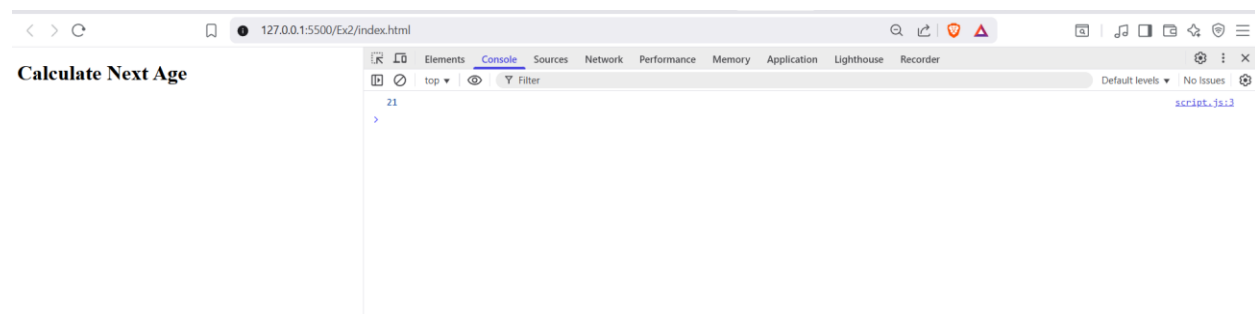## Exercise 1: Declaring Variables

Declare a variable name with the value "Van Lang IT" and log it to the console.
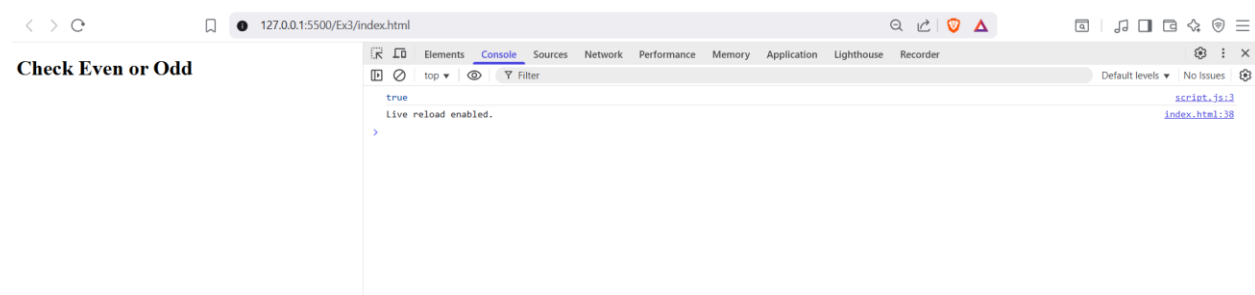


## Exercise 2: Using Arithmetic Operators

Create a variable nextAge that stores the next age based on the given age. For example, if age = 20, then nextAge = 21.
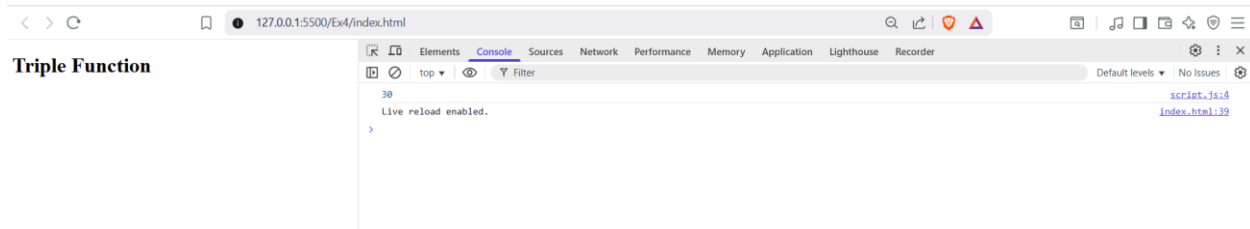


## Exercise 3: Using Comparison Operators

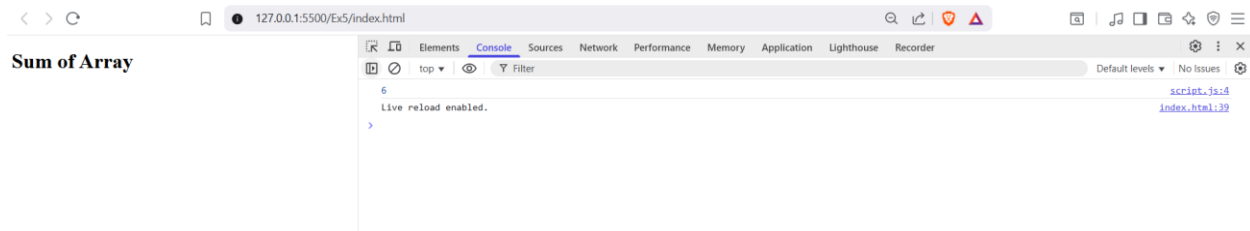Check if a number is even or odd using the modulo operator and log the result (true for odd, false for even).



## Exercise 4: Creating Functions

Create a function triple that takes a parameter x and returns its value multiplied by 3.
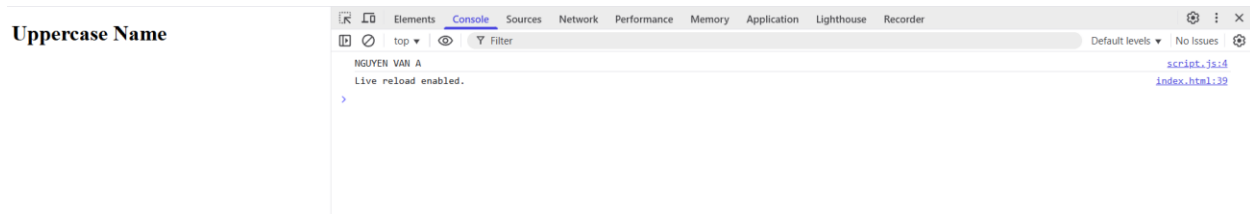
## Exercise 5: Working with Arrays

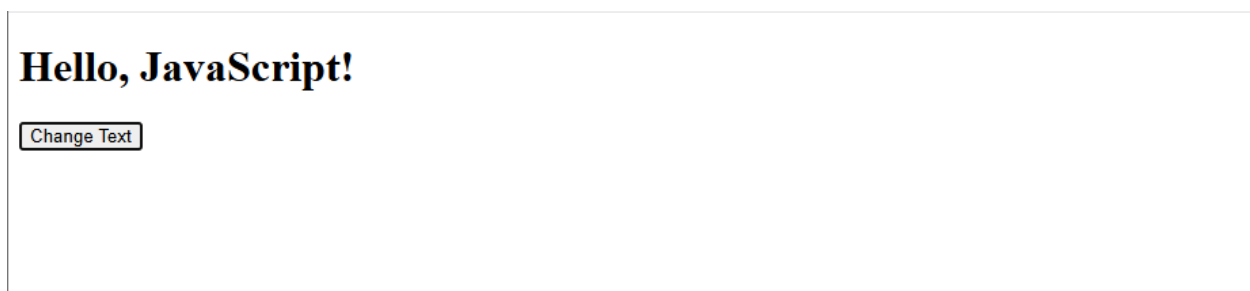Create a function sumArray that takes an array of numbers and returns their sum.

## Exercise 6: String Manipulation

Create a function toUpperCaseName that converts a given name to uppercase.
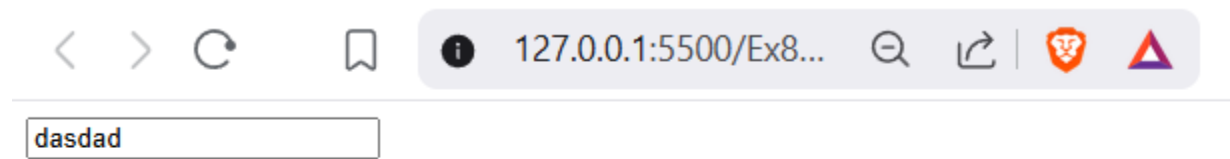
## Exercise 7: DOM Manipulation

Change the text of an element to "Hello, JavaScript!" when a button is clicked.
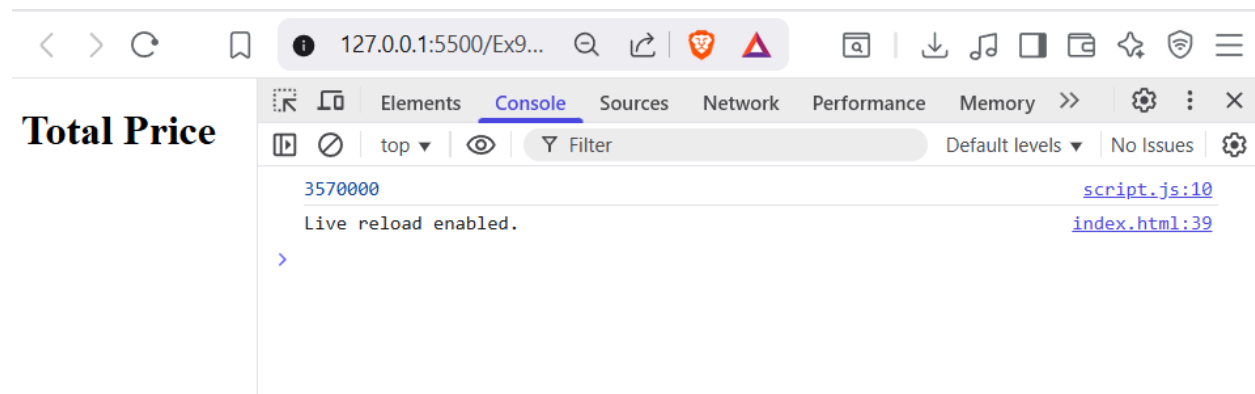
## Hello, JavaScript!

Change Text

## Exercise 8: Event Handling

Create an input field that logs its value to the console whenever the user types.
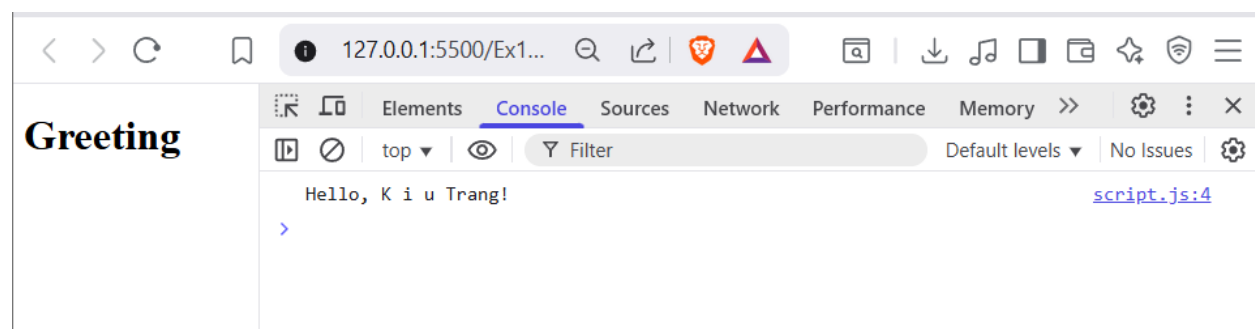


## Exercise 9: Working with Objects

Calculate the total price of items in an array of objects, where each object has a price property.
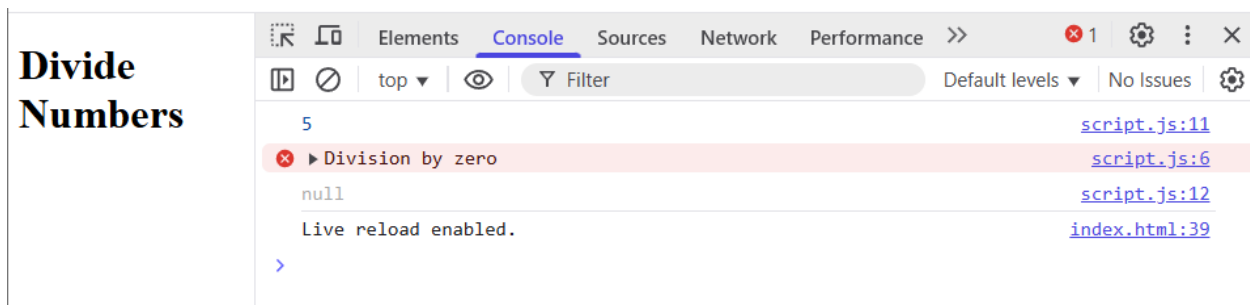


## Exercise 10: Using ES6+ Features

Use template literals and destructuring to create a greeting message from an object.
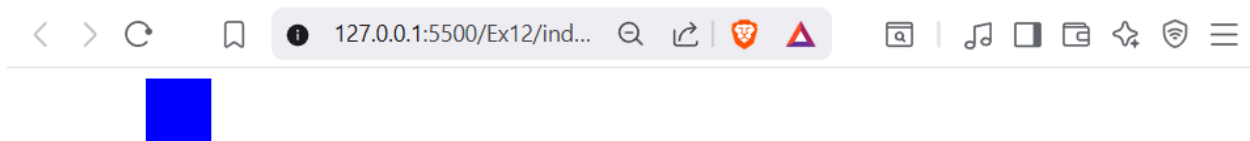


## Exercise 11: Error Handling

Create a function that divides two numbers and handles division by zero with try/catch.

**Divide Numbers**

## Exercise 12: Simple Animation

Create a box that moves 100px to the right over 2 seconds using setInterval.

## Exercise 13: Asynchronous JavaScript

Fetch data from a public API (JSONPlaceholder) and display user names in a list.
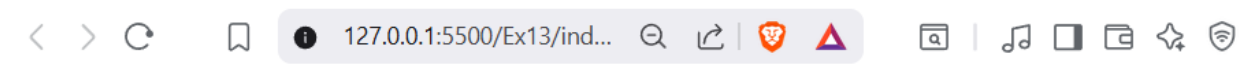
# User List

- Leanne Graham
- Ervin Howell
- Clementine Bauch
- Patricia Lebsack
- Chelsey Dietrich
- Mrs. Dennis Schulist
- Kurtis Weissnat
- Nicholas Runolfsdottir V
- Glenna Reichert
- Clementina DuBuque

## Exercise 14: Form Validation

 Create a registration form that validates email and password inputs. Display error messages if:

• Email is empty or does not contain @.

• Password is empty or less than 6 characters.

## Register

Email:

phu.2374802010390@vanlanguni

Invalid email format

Password:

•••••••••••••

Submit

**Exercise 15: Dynamic Content Rendering**

Create a simple to do list where users can add tasks via an input field. Display the tasks in a list and allow deletion of tasks.

## Todo List

Add a task...    Add Task

- dasd  Delete
- dasda  Delete
- dagagag  Delete

**Exercise 16: Using localStorage**

Extend the to do list from Exercise 15 to save tasks to localStorage so they persist after page reload.

**Persistent Todo List**
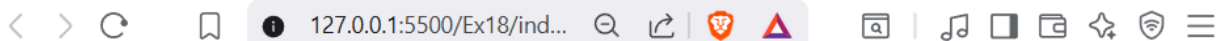
Add a task... [Add Task]

- JavaScript  Delete

### Exercise 17: Drag-and-Drop

Implement a drag-and-drop feature to reorder tasks in the to do list from Exercise 15.

**Drag-and-Drop Todo List**

Add a task... [Add Task]

- dadada

### Exercise 18: Real-Time Clock with API

 Create a digital clock that displays the current time, updated every second, using the browser's Date object.

127.0.0.1:5500/Ex18/ind...

**Digital Clock**

08:35:36

### Additional Exercises

• **Build a simple calculator with addition, subtraction, multiplication, and division.**

• Create a slideshow that changes images every 3 seconds with next/previous buttons.

• Implement a shopping cart that allows adding/removing items and calculates the total price.
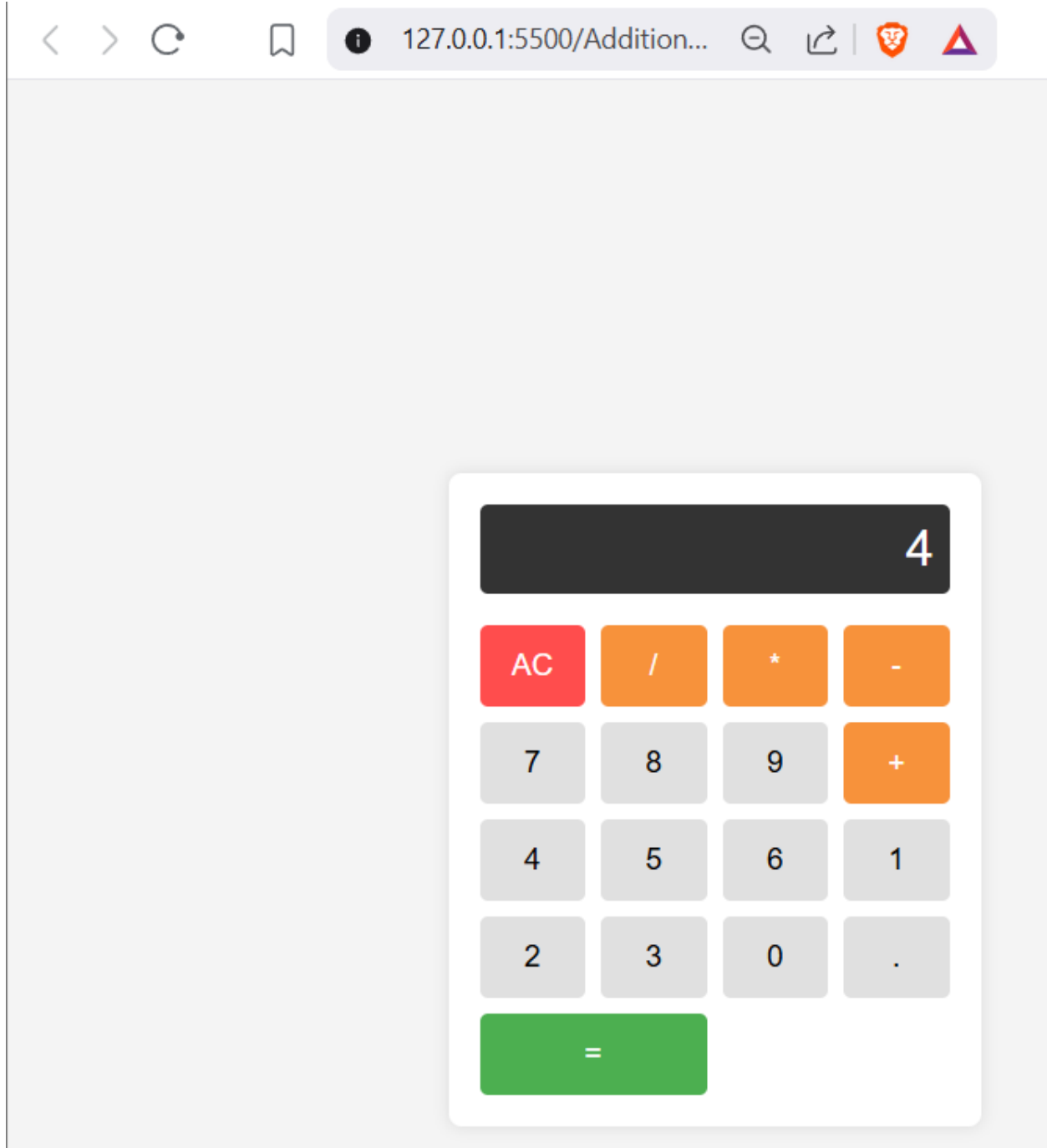
**• Develop a quiz application with multiple-choice questions and a score tracker.**

# Simple Quiz

## What is the largest ocean on Earth?

◉
Atlantic Ocean

○
Indian Ocean

○
Arctic Ocean

○
Pacific Ocean

**Incorrect! The correct answer was: Pacific Ocean**