

**Batch - T5****Practical No. - 3****Title – Study of JavaScript****Student Name - Sharaneshwar Bharat Punjal****Student PRN - 23520011****Problem Statement 1: Basics of Java Script**

Write a JavaScript function that takes an array of numbers as input and returns the sum of all numbers divisible by 10 in the array. Additionally, create a simple HTML interface with an input field where the user can enter comma-separated numbers and a button to trigger the calculation. Display the result below the button.

**Screenshot:****Sum of Numbers Divisible by 10****Calculate Sum****Sum of Numbers Divisible by 10****Calculate Sum**

Sum of all numbers divisible by 10: 450

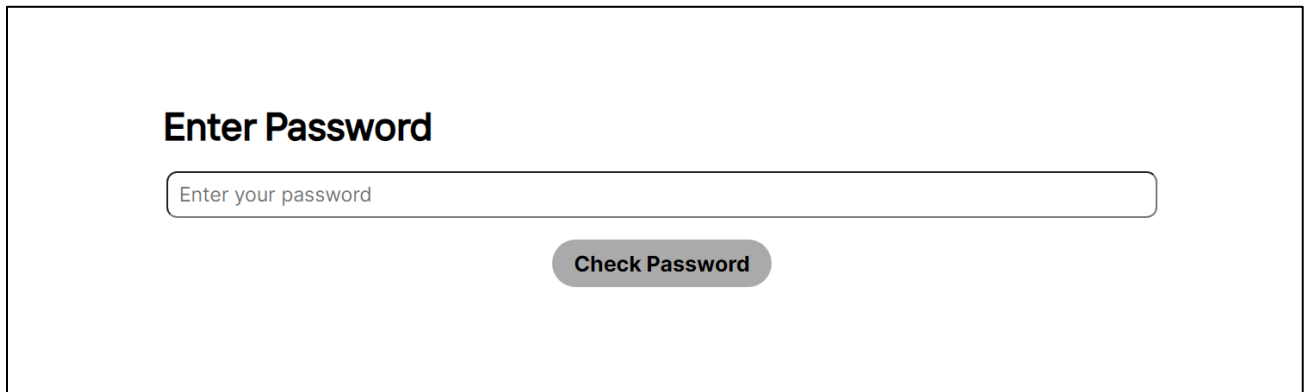
**Problem Statement 2: Implement a function that validates a password based on the following criteria:**

At least 8 characters long.

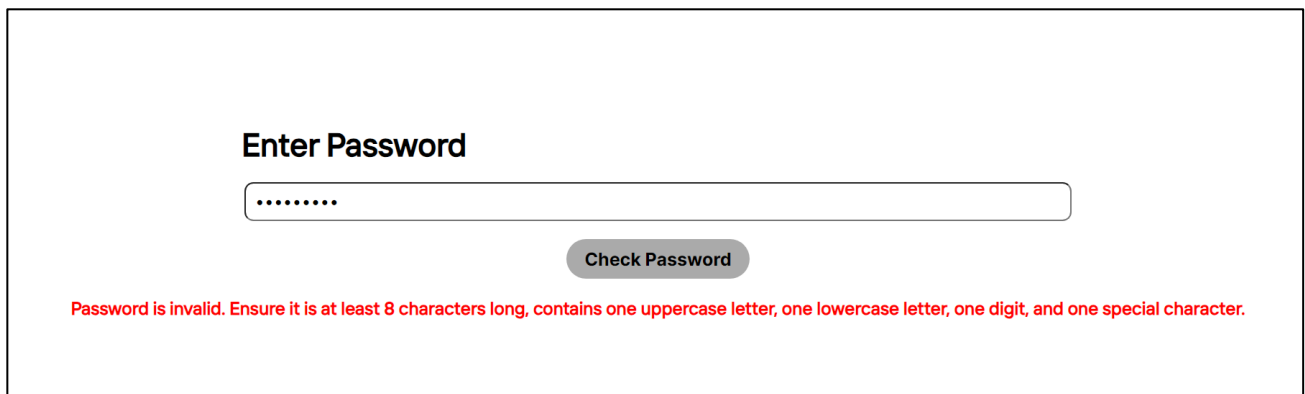
Contains at least one uppercase letter, one lowercase letter, one digit, and one special character.

Create an HTML form with an input field for the password and a "Check Password" button.

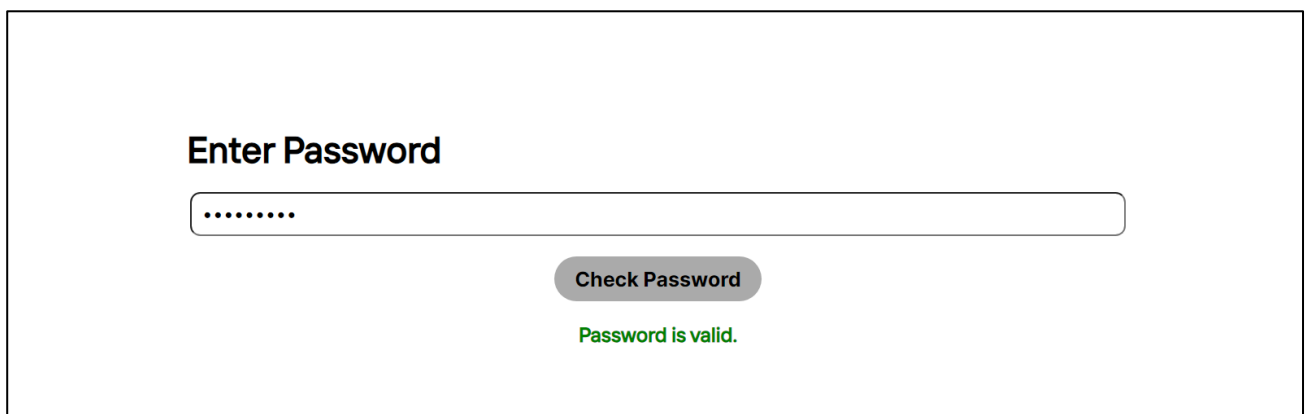
Display a message indicating whether the password is valid or not.

**Screenshot:**

The screenshot shows a web form titled "Enter Password". It contains a text input field with the placeholder text "Enter your password" and a "Check Password" button. The form is displayed in a simple, clean layout with a light gray background.



The screenshot shows the same form as the previous one, but with a password entered (represented by dots). The "Check Password" button is still present. Below the button, a red message states: "Password is invalid. Ensure it is at least 8 characters long, contains one uppercase letter, one lowercase letter, one digit, and one special character."



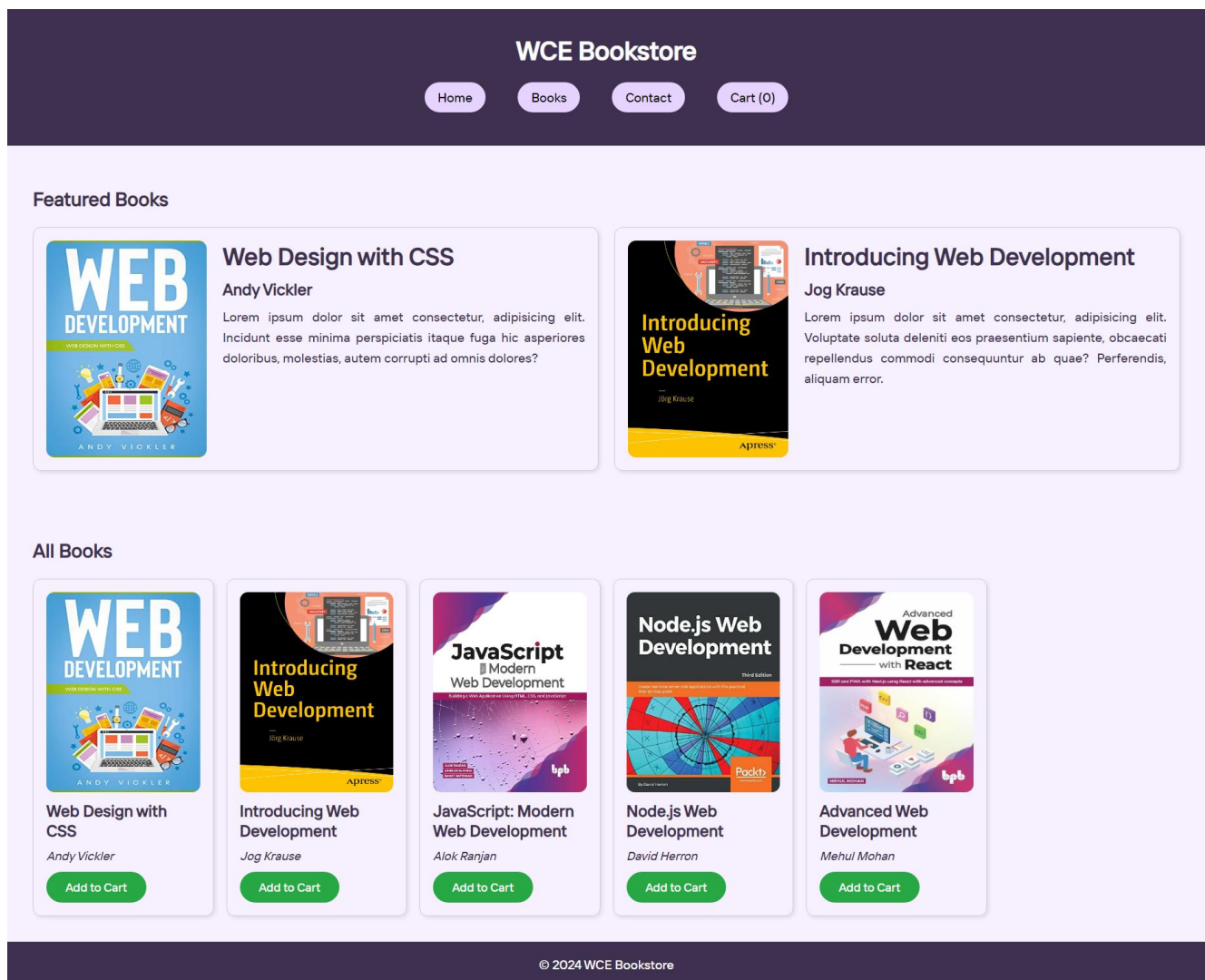
The screenshot shows the same form as the previous ones, but with a password entered (represented by dots). The "Check Password" button is still present. Below the button, a green message states: "Password is valid."

### Problem Statement 3: Web Development

Create a basic web page for a fictional online bookstore using HTML, CSS, and JavaScript. The web page should have the following features:

- A header with the bookstore name and a navigation menu (Home, Books, Contact).
- An area to showcase featured books with their titles, authors, and cover images.
- A section where all available books are displayed in a grid format. Each book should have an image, title, author, and a button to "Add to Cart".
- Implement a simple shopping cart functionality using JavaScript. Allow users to add books to their cart and display the total number of items in the cart on the navigation menu.

#### Screenshot:



### Problem Statement 4: Responsive Design

- Implement responsive design techniques to make the website mobile-friendly.
- Ensure that the navigation menu collapses into a hamburger menu on smaller screens.
- Adjust the layout and font sizes for optimal viewing on various devices.

**Screenshots:**

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