

Problem Statement: Online Bookstore Array Management

You are building a small online bookstore system in JavaScript. The bookstore stores the list of books in an array. You need to implement different array methods to manage the books (add, remove, modify, search, merge, etc.). This task will help you clearly understand and practice all the important array methods in real-life scenarios.

Requirements:

- 1 Start with an array of books: ['Math', 'Science', 'English'].
- 2 Add new books using push() and unshift().
- 3 Remove books using pop() and shift().
- 4 Delete a specific book using splice().
- 5 Merge arrays of new arrivals using concat().
- 6 Copy a part of the book list inside the same array using copyWithin().
- 7 Flatten a nested array of categories using flat().
- 8 Use slice() to create a small section of books for display.
- 9 Use toString() and join() to show the book list as a string with different separators.
- 10 Find the total number of books using length.
- 11 Replace/update a book in the list by directly changing its index.
- 12 Use forEach() to display all books with their positions.

Task:

Write a JavaScript program in an HTML file that performs all the above operations step by step and shows the results on the web page. Each operation should display the updated list of books so that the effect of each array method is clearly visible.