

**Important:** In this exercise try to use the javascript programming language.

## **Easy**

### **Exercise 1**

Concatenating Two Words Entered by the User

This program prompts the user to input two separate words, concatenates them, and then displays the result in a prompt. The goal is to demonstrate how user input can be captured and manipulated to form a new string by joining two words together.

Requirements:

- The program should ask the user to enter two words, one at a time.
- It will then concatenate the two words without adding any spaces or additional characters between them.
- Finally, the program will display the concatenated string in a pop-up alert.

Example:

If the user inputs the words:

- First word: `Good`
- Second word: `Morning`

The output will be:

*The concatenated result is: GoodMorning*

Steps:

1. The user is prompted to enter the first word.
2. The user is then prompted to enter the second word.
3. Both words are concatenated (joined together as a single string).
4. The concatenated result is displayed in an alert.

## **Middle-Medium**

### **Exercise 2: Count the letters in a string**

Ask the user to enter a string, then display the number of letters it contains (ignoring spaces).

### **Exercise 3: sum of an array**

Write a function that takes an array of integers as input and returns the sum of all its elements.

### **Exercise 4**

Manipulate Array by Moving Zeroes to the Beginning

### **Exercise 5: Reverse a string**

Ask the user to enter a string, then display the string reversed.

## **Medium**

### **Exercise 4**

#### Manipulate Array by Moving Zeroes to the Beginning

Write a JavaScript function that accepts an array of integers as input. The goal of this exercise is to traverse through the array, find any occurrence of the number `0`, and move all zeroes to the beginning of the array, while maintaining the relative order of the non-zero elements.

#### Requirements:

- The function should take an array of integers as input.
- If a `0` is found in the array, it should be removed from its current position and placed at the beginning of the array.
- The relative order of non-zero elements should not change.
- The function should return the modified array.

#### Example

Input: [1, 0, 3, 0, 5]

Output: [0, 0, 1, 3, 5]

Input: [0, 2, 0, 4, 0, 1]

Output: [0, 0, 0, 2, 4, 1]

Input: [7, 8, 9]

Output: [7, 8, 9]

#### Key Points to Consider:

- The function should handle edge cases, such as an array with no zeroes or an array that contains only zeroes.
- Aim for an efficient solution that minimizes the number of operations performed on the array.