Array Manipulations Practical’s

**Practical 1: Sorting and Filtering**

1. Create an array of random numbers between 1 and 100.
2. Sort the numbers in ascending and descending order.
3. Filter out numbers greater than 50 from the sorted array.

**Practical 2: Array Modification**

1. Create an array of five fruits (e.g., ["apple", "banana", "cherry", "date", "fig"]).
2. Add two fruits to the beginning of the array.
3. Remove the last fruit from the array.
4. Replace the second and third fruits with new ones using splice.

**Practical 3: Slicing and Splicing**

1. Create an array of names (e.g., ["Alice", "Bob", "Charlie", "Diana", "Eve"]).
2. Extract the first three names using slice without modifying the original array.
3. Using splice, remove the last two names from the original array and store them in a new array.

**Practical 4: Combining and Reversing Arrays**

1. Create two arrays of colors (e.g., ["red", "green", "blue"] and ["yellow", "pink", "purple"]).
2. Combine both arrays into one.
3. Reverse the combined array and print the result.

**Practical 5: Finding and Indexing**

1. Create an array of numbers between 10 and 20.
2. Find the index of the number 15.
3. Check if the number 18 exists in the array using includes.

**Practical 6: Real-World Scenario**

1. Create an array of five objects representing books (e.g., {title: "Book A", author: "Author A"}).
2. Extract titles into a new array.
3. Sort the books by title alphabetically using sort.