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Assignment: Array Operations

Objective

To practice fundamental **array operations** such as searching, traversal, aggregation, sorting, and manipulation using basic programming logic.

Instructions

- Use a **single-dimensional array**
- Write clean and readable code
- Display appropriate output for each operation

Tasks

1. **Search an Element in an Array**
   Write a program to search a given number in an array and display its index if not found give message.
2. **Find First Minimum and First Maximum Element**
   Identify and print the first minimum and first maximum values from the array.
3. **Find the Sum of All Elements**
   Calculate and print the sum of all numbers present in the array.
4. **Separate Odd and Even Numbers**
   Print all odd numbers and even numbers from the array.
5. **Print Alternate Elements**
   Display elements present at alternate index in the array.
6. **Print Prime Numbers from Array**
   Accept an array and print only the prime numbers.
7. **Add Two Arrays and Store Result in Third Array**
   Given two arrays of equal size, calculate their element-wise sum and store it in a third array.

   Example:

   ```
   arr[5] = {1, 2, 3, 4, 5}
   brr[5] = {10, 20, 30, 40, 50}
   crr[5] = {11, 22, 33, 44, 55}
   ```
8. **Merge Two Arrays**
   Combine two arrays into a single array and display the result.
9. **Reverse the Given Array**
   Reverse the elements of the array without using extra arrays (if possible).
10. **Sort the Array in Ascending and Descending Order**
    Sort the array in:
    - Ascending order
    - Descending order
11. **Find the Second Maximum Element**
    Identify and print the second largest element in the array.