1D and 2D Array Coding Questions

1D Array Questions

1. Sum of Array Elements: Write a program to calculate the sum of all elements in a 1D array of integers.

2. Find the Maximum and Minimum: Write a program to find the maximum and minimum elements in a 1D array.

3. Reverse an Array: Write a program to reverse the elements of a 1D array in-place.

4. Frequency of Elements: Write a program to find the frequency of each element in a 1D array.

5. Check for Sorted Array: Write a program to check if a given 1D array is sorted in ascending order.

2D Array Questions

6. Matrix Addition: Write a program to add two 2D arrays (matrices) of the same dimensions.

7. Matrix Multiplication: Write a program to multiply two 2D arrays.

8. Transpose of a Matrix: Write a program to calculate the transpose of a 2D array.

9. Find Saddle Point: A saddle point in a matrix is an element that is the minimum in its row and maximum in its column. Write a program to find the saddle point of a matrix.

10. Search an Element in a Matrix: Write a program to search for a given element in a 2D array and return its position.