Searching Questions

1. Linear Search:
   Write a program to search for a given number in an array using Linear Search. Display the position if found, otherwise display "Not Found".
2. Binary Search (Iterative):
   Write a program to search for an element in a sorted array using Binary Search (Iterative method).
3. Binary Search (Recursive):
   Implement Binary Search using recursion. Compare its execution with iterative version.
4. Search in 2D Array:
   Input a `m x n` matrix and search for a given number inside the matrix. Display row & column if found.
5. Count Occurrences:
   Given a sorted array, write a program to find how many times a given element appears using Binary Search logic.

Sorting Questions

1. Bubble Sort:
   Write a program to sort an array of integers using Bubble Sort.
2. Selection Sort:
   Implement Selection Sort to sort an array of n numbers in ascending order.
3. Insertion Sort:
   Write a program that sorts an array using Insertion Sort.
4. Merge Sort (Divide & Conquer):
   Implement Merge Sort using recursion.
5. Quick Sort:
   Write a program to sort an array using Quick Sort.
6. Sort Strings:
   Input n names from the user and sort them alphabetically using any sorting algorithm.
7. Sorting with Structures:
   Create a `struct Student` (rollNo, name, marks).
   Write a program to sort students by marks in descending order.