CMPE124/ISYE223
Algorithms and Programming

Supportive Revision Questions
ARRAYS

Question 1

C++ Programming: Passing a 2D Array to a Function

Write a C++ function that takes a 2D array of integers and its dimensions as parameters, then prints the elements of the 2D array in a matrix format. Implement this function and call it from the `main` function.

Question 2

C++ Programming: Summing Array Elements

Write a C++ function that takes an array of integers and its size as parameters, then returns the sum of all the elements in the array. Implement this function and call it from the `main` function. Print the sum in the `main` function.

Question 3

C++ Programming: Calculating Average of Array Elements

Write a C function that takes an array of integers and its size as parameters, then returns the average of the elements in the array. Implement this function and call it from the `main` function. Print the average in the `main` function.

Question 4: Finding the Maximum Element in a 2D Array

Write a C++ function that takes a 2D array of integers and its dimensions as parameters, then returns the maximum element in the 2D array. Implement this function and call it from the `main` function. Print the maximum element in the `main` function.

Question 5: Counting Occurrences of an Element

Write a C++ function that takes an array of integers, its size, and an integer value as parameters, then returns the number of occurrences of the given value in the array. Implement this function and call it from the `main` function. Print the number of occurrences in the `main` function.