

Lab 7: Programming Fundamentals

Arrays

Instructions

- Make your own files like Q1.cpp, Q2.cpp, zip the files with your roll number and upload on the slate. Someone failed to upload the task, will be awarded with zero marks.
 - *Apply proper checks and necessary conditions while taking input and calculating a value*
 - *Use proper Indentation in your code. Marks will be deducted if proper indentation is missing.*
 - Please read the questions carefully, read them twice even thrice to understand them completely.
 - In case of any query, please raise your hands and we will be there to solve your query.
 - Identify the appropriate data types of variables that you want to use in the program.
 - Always print the appropriate messages for the inputs and outputs of program in proper formatted style.
 - *You are required to complete all the tasks in lab time. Evaluation will be started 30 minutes before end time.*
 - You are advised to delete your code while you are leaving lab, in case of plagiarism you can be awarded with F grade in lab.
 - Please concentrate, understand and code. Good Luck :)
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Q 1. Write a C++ program in which declare an integer array of size 5 and find the largest element of this given array.

Q 2. Write a C++ program in which declare an integer array of size 10, take input values of array from the user. Then ask a user to enter a number (n) and display the larger elements of this given array than the entered number(n).

Q 3. Write a C++ program in which declare an integer array of size 10 and find the smallest and second smallest elements in a given array of integers.

Q 4. Create an array that can hold ten integers, and get input from user. Display those values on the screen, and then prompt the user for an integer. Search through the array, and count the number of times the item is found.

Q 5. Write a C++ program in which declare an integer array of size 10 and find all elements in array of integers which have at-least two greater elements.

Q 6. Write a program to create two arrays (A and B) of size 10, take input and then create two new arrays C and D where $C=A-B$ and $D=B-A$.

Q 7. Write a C++ program to separate even and odd numbers of an array of integers. Put all even numbers first, and then odd numbers.

Q 8. A local zoo wants to keep track of how many pounds of food each of its three monkeys eats each day during a typical week. Write a program that stores this information in a two-dimensional 3 5

array, where each row represents a different monkey and each column represents a different day of the week. The program should first have the user input the data for each monkey. Then it should create a report that includes the following information:

- Average amount of food eaten per day by the whole family of monkeys.
- The least amount of food eaten during the week by any one monkey.
- The greatest amount of food eaten during the week by any one monkey.