Dear Student,

We have completed Array concept and utilised total 9 lectures to build the basics of Array fundamentals.

You are supposed to write and execute all programs on your own strictly without taking help of google.

Important Instructions:

1. Make a separate 200 pages Assignment Notebook for assignment submission.

2. ⁠Last date of completion of assignment is 22/11/2024.

3. ⁠After completion, take sign of Prof Leena Vaidya and mine on index page.

4. ⁠You can complete this assignment at your home also with lab sessions.

5. ⁠Strictly dont make copy paste from your friends, it will be your loss.

6. ⁠You can also complete this assignment today as it is holiday.

7. ⁠After taking sign, scan the assignment in pdf format and upload on Google Classroom.

Java Array Lab Assignments

1. Write a Java program to sort a numeric array and a string array.

2. ⁠Write a Java program to sum values of an array.

3. ⁠Write a Java program to calculate the average value of array elements.

4. ⁠Write a Java program to test if an array contains a specific value.

5. ⁠Write a Java program to find the index of an array element.

6. Write a Java program to remove a specific element from an array.

7. ⁠⁠Write a Java program to insert an element (specific position) into an array.

8. ⁠Write a Java program to find the maximum and minimum value of an array.

9. ⁠Write a Java program to reverse an array of integer values.

10. ⁠Write a Java program to find duplicate values in an array of integer values.

11. ⁠Write a Java program to find duplicate values in an array of string values.

12. ⁠Write a Java program to find the second largest element in an array.

13. ⁠Write a Java program to find the second smallest element in an array.

14. ⁠Write a Java program to add two matrices of the same size.

15. ⁠Write a Java program to move all 0's to the end of an array. Maintain the relative order of the other (non-zero) array elements.

16. ⁠Write a Java program to compute the average value of an array of integers except the largest and smallest values.

17. ⁠Write a Java program to remove duplicate elements from a given array and return the updated array length.

Sample array: [20, 20, 30, 40, 50, 50, 50]

After removing the duplicate elements the program should return 4 as the new length of the array.

18. Given two sorted arrays A and B of size p and q, write a Java program to merge elements of A with B by maintaining the sorted order i.e. fill A with first p smallest elements and fill B with remaining elements.

Example:

Input :

int[] A = { 1, 5, 6, 7, 8, 10 }

int[] B = { 2, 4, 9 }

Output:

Sorted Arrays:

A: [1, 2, 4, 5, 6, 7]

B: [8, 9, 10]

19. Write a Java program to find the maximum product of two integers in a given array of integers.

Example:

Input :

nums = { 2, 3, 5, 7, -7, 5, 8, -5 }

Output:

Pair is (7, 8), Maximum Product: 56

Wish you all the Best

Prof. Dr. Manoj Sathe