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**Foundation Course – Assignment 2**

*Deadline: 30 June 2022*

**Question: 1**

Write a program to print the product and sum of all elements in an array. Take an input of N numbers from the user and store it in an array. First print the numbers from the array and then print the sum and product of all numbers in an array

**Question: 2**

Write a program to find the largest and the second largest number in the array.

**Question: 3**

Write a program to delete the prime numbers in the array.

**Example:**

If A = {2,3,6,7,12,13,15} then output should be A = {6,12,15}

**Question: 4**

Write a program to delete the duplicates from the array.

**Example:**

If A = {2,2,5,8,5,9,3} then output should be A = {2,5,8,9,3}

**Question: 5**

Write a program to find the two repeating elements in a given array of integers

**Question: 6**

Write a program that reads ***N*** integers, determines how many positive and negative values have been read and computes the total and average of input values.

**Sample Output:**

Enter N: 4

Enter 5 values : 1 2 -1 3

The number of positive numbers: 3

The number of negative numbers: 1

Total is: 5

Average is: 1.25

**Question: 7**

Write a program that must take the whole string from the main and return the number of vowels appears in the string. Handle both upper and lower case letters. For example if the input string is “CUREMD” then the output should be 2.

**Question: 8**

Write a program that replaces the contents of each cell with the sum of the contents of all the cells in the original array from the left end to the cell in question.

**Example:**

**Input:**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| 5.8 | 2.6 | 9.1 | 3.4 | 7.0 |

**Output:**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| 5.8 | 8.4 | 17.5 | 20.9 | 27.9 |

**Question: 9**

Suppose A, B, C are arrays of integers of size M, N and M+N respectively.

* The number in array A appear in ascending order
* while the numbers in array B appear in descending order.

Write a user program to produce third array C by emerging arrays s A and B in ascending order.

**Question: 10**

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

**Question: 11**

Write a program to swap first and last element of an integer 1-d array.

**Question: 12**

Write a function that copies one c-string to another c-string, by replacing all the “ies” parts of the string by just an ‘s’. So if the first string is “Who worries about curries”, the second string made by the function should “Who worrs about currs”.