

ASSIGNMENT

Chap 3: Assign:1

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Instructions:

- **Complete These Codes ASAP!**
- **Ask Group leader For Help If It Is Really Needed.**
- **Complete This Assignment With Your Class Codes.**
- **Submit This Assignment ASAP!**
- **Take necessary inputs from user!**

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Program 1: Write a C program that has an array of integers take size of array from user and elements too, print that array.

Input: Size of Array: 10

Random input from user

Output: Print Entered Array.

Program 2: Write a C program that has an array of integers take size of array from user and elements too, print the Sum of elements in array.

Input: size of array = 9

1 2 3 4 5 6 7 8 9

Output: sum of array element = 45

Program 3: Write a C program that has an array of integers take size of array from user and elements too, Calculate Sum of squares of all even elements in array and print it.

Input: Size of Array 10

1 2 3 4 5 6 7 8 9 10

Output: Sum of Squares of Even elements in array: 220

Program 4: Write a C program that has an array of floats take size of array from user and elements too, Calculate Multiplication of all odd index based elements in array and print it.

Input: Size of Array 8

10.34 2.3 0.24 1.23 16.00 7.2 8.8 9.2

Output: Sum of Even elements in array: 65476.839

Program 5: Write a C program that has an array of integers take size of array from user and elements too, Find Smallest Element & Largest element from array and print it.

Input: Size of Array 10

9 2 1 3 0 22 44 5 9 2

Output: Smallest element in array is 0 && Largest element in array is 44

Program 6: Write a C program that has an array of integers take size of array from user and elements too, find occurrence of 1's (Ones as in digits) in array.

Input: Size of array: 9

121 3 45 21 61 11 12 22 4

Output: Occurrence of 1's in array: 7

Program 7: Write a C program that has an array of Characters take size of array from user and elements too, Toggle case of all vowels in array and print it

Input: Size of array: 8

C o r e 2 W E b

Output: C O r E 2 W e b

{Note: Word toggle case says that UPPERCASE to lowercase and converse }

Program 8: Write a C program that has an array of Characters take size of array from user and elements too, Print Occurrence of Vowels & Consonants in array.

Input: Size of array : 11

H e l l o W o r l d

Output:

Occurrence of vowels are : 3

Occurrence of consonants are : 7

Program 9: Write a C program that has an array of integers take size of array from user and elements too, reverse the element in array.

Input: Size of array : 9

1 2 3 4 5 6 7 8 9

Output: Reversed Array: 9 8 7 6 5 4 3 2 1

Program 10: Write a C program that has an array of character precision numbers take size of array from user and elements too, Sort each element in array in ascending order of alphabets and print it.

Input: Size of array: e

S o r t M e

Output : e m o r s t

Test Case : 0. all UPPERCASE letters must be converted into lowercase.

1. size of array should be checked for positive integer.

Program 11: Write a C program that has an array of integers take size of array from user and elements too, Check whether each element in array is either palindrome number or strong number if fails to fit in these two then it should check that whether that number is odd or even. print the result accordingly.

{ Note : Separate Parametrized function should be used for executions && can also use return statements to validate function work }

Input : Size of Array : 7

121 145 2 153 12321 44 1

Output :

Element 121 is a Palindrome Number.

Element 145 is a Strong Number.

Element 2 is a Strong Number.

Element 153 is a Odd Number.

Element 12321 is a Palindrome Number.

Element 44 is a Even Number.

Element 1 is a Strong Number.

Test Cases : 0. Size of array should be positive odd number ranging between 1 to 10 only if not then program should ask to re-enter size.

1. If one function returns true for particular element then it should not go for next function to check for.