

**Coding Statement 1 : Write a Program to reverse a string.**

**Description:** Get an input string from user and print it in reverse order.

Input Hello

Output olleH

**Coding Statement 2 : Write a Program to Remove vowels from a string.**

**Description:** Get a string as the input from the user and then remove all the vowel letters from the string and give the output.

Input remove

Output

rmv

**Coding Statement 3 : Write a Program to print Length of the string without using strlen() function.**

**Description:** Get a string as input from user and print the length of the string without using strlen() function.

Input Hello

Output 5

**Coding Statement 4 : Write a Program to Toggle each character in a string .**

**Description:** Get an input string from user and then convert the lower case of alphabets to upper case and all uppercase alphabets into lower case.

Input Hello

Output hELLO

**Coding Statement 5 : Write a Program to Count the sum of numbers in string.**

**Description:** Get a string from the user and find the sum of numbers in the string.

Input Hello56

Output 11

**Coding Statement 6 : Write a Program to Remove vowels from a string.**

**Description:** Get a string as the input from the user and then remove all the vowel letters from the string and give the output.

Input remove

Output rmv

**Coding Statement 7 : Write a Program to check if String is a palindrome or not.**

**Description:** Get an input string from the user and then check whether it is a palindrome string or not.

Input noon

Output Palindrome

Input Talent

Output Not a Palindrome

**Coding Statement 8 : Write a Program to Remove brackets from an algebraic expression.**

**Description:** Get an algebraic expression as input from the user and then remove all the brackets in that.

Input  $7x+(2*y)$

Output  $7x+2*y$

**Coding Statement 9: Write a Program to Capitalize the first and last letter of each word of a string .**

**Description:** Get a string from the user and then change the first and last letter to uppercase.

Input programming

Output ProgramminG

**Coding Statement 10: Write a Program to calculate the Frequency of characters in a string.**

**Description:** Get a string as the input from the user and find the frequency of characters in the string.

Input

program

Output

The frequency of a is 1

The frequency of g is 1

The frequency of m is 1  
The frequency of o is 1  
The frequency of p is 1  
The frequency of r is 2

**Coding Statement 11 : Write a Program to print Non-repeating characters in a string.**

**Description:** Get a string as the input from the user and print the non-repeating characters in a string.

Input

Hello

Output

H e o

**Coding Statement 12 : Write a Program to check if two strings are Anagram or not .**

**Description:** Get two strings as input from the user and check whether it is Anagram or not.

Input

sunlight thgiluns

Output

Anagram

**Coding Statement 13: Write Program to check if two arrays are the same or not .**

**Description:** Get two arrays as the input from the user and check whether it is the same or not.

Input

Enter the size of first array: 3

Enter the size of second array: 3

Enter elements of first array: 1 2 3

Enter elements of second array: 1 2 3

Output

Same

**Coding Statement 14 : Write Program to find the array type .**

**Description:** Get an array as input from the user and check the type of the array, whether it is odd, even or mixed type.

Input

Enter size of array: 3

Enter elements 1 3 5

Output

Odd

**Coding Statement 15 : Check if two strings match where one string contains wildcard characters .**

**Description:** Get two strings as input from the user, first with wildcard characters (\* and ?) and second without wildcard characters. Then check whether they match or not.

Input

Ta\*\*nt Talent

Output

Yes they match

**Coding Statement 16 : Write Program to find number of even and odd elements in an array.**

**Description:** Get an array as input from the user and then count the number of even and odd elements present in the array.

Input

Enter size of array 4

Enter the elements: 1 3 4 5

Output

Number of even elements: 1

Number of odd elements: 3

**Coding Statement 17: Write Program to find smallest and largest element in an array.**

**Description** Get an array as input from the user and then find the smallest and largest element in the array.

Input

Enter the size of array: 5

Enter the elements: 10 20 5 40 30

Output

Smallest Number: 5

Largest Number: 40

**Coding Statement 18: Write Program to remove duplicate elements in an array .**

**Description:** Get an array as input from the user and then remove all the duplicate elements in that array.

Input Enter the size of array 5

Enter the elements of array 35 35 45 60 60

Output

35 45 60

**Coding Statement 19 : Given 2 integer arrays X and Y of same size.**

**Consider both arrays as vectors and print the minimum scalar product (Dot product) of 2 vectors.**

Sample input 1:

4 1 2 3 4 5 6 7 8

Sample output 1:

60

Explanation :  $(4*5 + 3*6 + 2*7 + 1*8) = 60$

Sample input 2:

4 -1 -2 -3 -4 5 6 -7 -8

Sample output 2: -

17

Explanation :  $(-1*-8 + -2*-7 + -3*6 + -4*5) = -17$

**Coding Statement 20 : Given an integer array of size N. Write Program to find whether Arrays are disjoint or not. Two arrays are said to be disjoint if they have no elements in common.**

Sample input 1:

4 2 -4 -1 -3 3 1 3 5

Sample output 1:

Disjoint

Sample input 2:

5 1 5 -7 6 3 4 2 4 6 8

Sample output 2: Not disjoint. ( 6 is common)

**Coding Statement 21 : Given an integer array of size N. Write Program to find maximum product sub-array in a given array.**

Sample input 1:

4 2 -4 -1 -3

Sample output 1:

8 = {2, -4, -1}

Sample input 2:

5 1 5 -7 5 3

Sample output 2:

15 = {5, 3}

**Coding Statement 22 : Given an integer array of size N, write a program to reverse the array.**

Sample input 1:

4 2 4 1 3

Sample output 1:

3 1 4 2

Sample input 2:

5 1 5 7 5 3

Sample output 2:

3 5 7 5 1

**Coding Statement 13 : Given an integer array of size N, write a program to sort the array.**

Sample input 1:

4 2 4 1 3

Sample output 1:

1 2 3 4

Sample input 2:

5

1 5 7 5 3

Sample output 2:

1 3 5 5 7

**Coding Statement 14 :** Given an integer array of size N. Write Program to find sum of positive square elements in the array.

Sample input 1:

4 1 2 3 4

Sample output 1:

30

Explanation :  $(1 + 4 + 9 + 16) = 30$

Sample input 2:

4 -1 -2 -3 -4

Sample output 2:

30

Explanation :  $(1 + 4 + 9 + 16) = 30$

**Coding Statement 25 :** Given 2 integer arrays X and Y of same size. Consider both arrays as vectors and print the sum of maximum scalar product (Dot product) of 2 vectors.

Sample input 1: 4 1 2 3 4 5 6 7 8

Sample output 1:

70

Explanation :  $(8*4 + 7*3 + 6*2 + 1*5) = 70$

Sample input 2:

4 -1 -2 -3 -4 5 6 -7 -8

Sample output 2:

37

Explanation :  $(-4*-8 + -3*-7 + -2*5 + -1*6) = 37$