



C Language: Assignment on Dynamic Memory Allocation

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1. Write a C program to find the sum of all the elements of an array.
(Using Dynamic Memory Allocation)
2. Write a C program to accept string with multiple spaces from user and print as it is. (Using Dynamic Memory Allocation)
3. Write a C program to accept string with multiple spaces from user and print it with a single space as a delimiter. (Using Dynamic Memory Allocation)

Eg:

Input String:

_____India_____is_my_____country_____

Output String:

India_is_my_country (Consider _ as space)

4. Write a C program that return the positions of the palindrome element in array (Using Dynamic Memory Allocation)
5. Write a C program to sort first half of array in ascending order and second half of array in descending order. (Using Dynamic Memory Allocation)
6. Write a C program to print count of number characters in given string.
(Using Dynamic Memory Allocation)
7. Write a C program to accept string and print it in the reverse order. (Using Dynamic Memory Allocation)

Eg:

Input String: India is my country

Output String: yrtnuoc ym si aidnl

8. Write a C program to copy the elements of one array into another array. (Using Dynamic Memory Allocation)
9. Write a C program to count count of number of vowels and number of consonants in the given string. (Using Dynamic Memory Allocation)
10. Write a C program to reverse a given string as below. (Using Dynamic Memory Allocation)

Eg:

Input String: India is my country

Output String: aidnl si ym yrtnuoc

11. Write a C program to sort only even numbers in given array. (Using Dynamic Memory Allocation)

Eg.

Input: 45 8 75 29 5 49 56 22 14 497 288 18 2

Output: 45 2 75 29 5 49 8 14 18 497 22 56 288

12. Write a C program to replace space with '\$' in given string. (Using Dynamic Memory Allocation)

Eg:

Input String: India is my country

Output String: India\$is\$my\$coutry

13. Write a program in C to separate odd and even integers in same array. (Using Dynamic Memory Allocation)
14. Write a program which accept sentence from user and print number of words from that sentence. (Using Dynamic Memory Allocation)

Input String: India_is_my_country

Output: 4

Input String: _____India_____is_____my_____country_____

(Consider _ as space)

Output: 4

15. Write a program in C to print all unique elements in an array.
(Using Dynamic Memory Allocation)

16. Write a C program to replace Good names in mail.

Eg:

Raw String: Hello GoodName

Input String: India

Output String: Hello India

Input String: Sangamner

Output String: Hello Sangamner

Input String: technOrbit

Output String: Hello technOrbit

17. Write a program in C to insert New value in the array (sorted list). (Using Dynamic Memory Allocation)

18. Write a C program to print all fibonacci series upto each ASCII code of alphabates in given string. (Using Dynamic Memory Allocation)

19. Write a program in C to delete an element at desired position from an array. (Using Dynamic Memory Allocation)

20. Write a C program which accepts a string from user which contains a characters from 'b' to 'y'. (Using Dynamic Memory Allocation)

Eg:

Input String: mn jn kn kazfd

Output String: mn jn kn k

21. Write a C program which accept sentence from user and print number of small letters, capital (Using Dynamic Memory Allocation)

letters, Spaces and digits from that sentence.

Eg:

Input String: abcDE 5Glm1 O

Output String: Small: 5 Capital: 4 Digits: 2 Spaces: 2

22. Write a program in C to find the maximum / minimum element in an array. (Using Dynamic Memory Allocation)

23. Write a C program which accept sentence from user and print number of white spaces from that sentence. (Using Dynamic Memory Allocation)

Eg:

Input String: India is my country

Output: 3

24. Write a program in C to find the second largest element in an array. (Using Dynamic Memory Allocation)

25. Write a C program which accept sentence from user and print number of words of even and odd length from that sentence. (Using Dynamic Memory Allocation)

Eg:

Input String: India is my country. I love my country.

Output : Even: 5 Odd: 2

26. Write a C Program to Find the Number of Elements in an Array (Using Dynamic Memory Allocation)

27. Write a C program which accept sentence from user and print last word from that sentence. (Using Dynamic Memory Allocation)

Eg:

Input String: India is my country

Output String: country

28. Write a C Program to Check Array bounds while Inputting Elements into the Array (Using Dynamic Memory Allocation)

29. Write a C program which accept sentence from user and position from user and print the word at that position. (Using Dynamic Memory Allocation)

Eg:

Input String: India is my country

Input Position: 3

Output String: my

30. Write a C Program to Print the Alternate Elements in an Array
(Using Dynamic Memory Allocation)

31. Write a C program to convert the string from upper case to lower case.
(Using Dynamic Memory Allocation)

Eg:

Input String: India Is My Country

Output String: india is my country

32. Write a C Program to Find 2 Elements in the Array such that
Difference between them is Largest (Using Dynamic Memory
Allocation)

33. Write a C program which toggles the case of a string. (Using Dynamic
Memory Allocation)

Eg:

Input String: technOrbit Infosystems

Output String: TECHNoRBIT iNfOSYSTEMS

34. Write a C Program to Input a String & Store their Ascii Values in
an Integer Array (Using Dynamic Memory Allocation)

35. Write a C program to check whether given strings are Anagram strings or not. (Using Dynamic Memory Allocation)

Eg:

Input String1: abccd

Input String2: cbcda

Output String: Strings are anagram

36. Write a C program to store squares of the elements in the same array (Using Dynamic Memory Allocation)

37. Write a C program which accept string from user and copy that string into some another string. (Using Dynamic Memory Allocation)

38. Write a program which accept string from user and copy first N characters into some destination string. (Using Dynamic Memory Allocation)

Eg:

Input String: India is my country

Input of N: 8

Output String: India is

39. Write C Program to Find the two Elements such that their Sum is Closest to given number (Using Dynamic Memory Allocation)

40. Write a C program which accept string from user and accept number N then copy last N character into some another string. (Using Dynamic Memory Allocation)

Eg:

Input String: India is my country

Input of N: 5

Output String: is my

41. Write C Program to Find if a given Integer X appears more than $N/2$ times in a Sorted Array of N Integers (Using Dynamic Memory Allocation)

42. Write a C program which accept two strings from user and append second string after first string. (Using Dynamic Memory Allocation)

Eg:

Input String: India Country

Output String: IndiaCountry

43. Write C Program to Find Union & Intersection of 2 Arrays (Using Dynamic Memory Allocation)

44. Write a C program which accept two strings from user and append N characters of second string (Using Dynamic Memory Allocation) after first string.

Eg:

Input String: India Country

Input of N: 4

Output String: IndiaCoun

45. Write a C program which accept two strings from user and compare two strings. If both strings are equal then return 0 otherwise return difference between first mismatch character. (Using Dynamic Memory Allocation)

Eg:

Input String1: India is my country.

Input String2: India is my country.

Output: Both strings are equal.

46. Write a C program which accept two strings from user and compare only first N characters of two strings. If both strings are equal till first N characters then return 0 otherwise return difference between first mismatch character. (Using Dynamic Memory Allocation)

Eg:

Input String1: Ramayan

Input String2: Ramanacharya

Input of N: 4

Output: Both strings are equal.

47. Write a C program to find the sum of contiguous subarray within a one dimensional array of numbers which has the largest sum (Using Dynamic Memory Allocation)

48. Write a C program which accept two strings from user and compare two strings without case sensitivity. If both strings are equal then return 0

otherwise return difference between first mismatch character. (Using Dynamic Memory Allocation)

Eg:

Input String1: india Is mY cOuntry

Input String2: INDIA is MY country

Output: Both strings are equal.

49. Write a C program which accept string from user and then reverse the string till first N characters without taking another string. (Using Dynamic Memory Allocation)

Eg:

Input String: India is my country

Input of N: 8

Output : m si aidnly country

50. Write a C program which accept string from user and then accept range and reverse the string in that range without taking another string. (Using Dynamic Memory Allocation)

Eg:

Input String: India is my country

Input of N1: 3

Input of N1: 9

Output String: Indm si aicountry

51. Write a C program to find the maximum sum of a subsequent numbers in given array. (Using Dynamic Memory Allocation)

52. Write a C program which accept string from user and reverse words from that string which are of even length. (Using Dynamic Memory Allocation)

Eg:

Input String: India is my country. I love my country.

Output String: India si ym .yrtnuoc I evol ym . Yrtnuoc

53. Write a C program which accept string from user and check whether string is palindrome or not. (Using Dynamic Memory Allocation)

Eg:

Input String: level

Output String: String is palindrome.

54. An array consist of Integers. Write a C program to count the number of elements less than, greater than and equal to zero. (Using Dynamic Memory Allocation)

55. Write a C program to count number of alphabates, spaces and words in given string. (Using Dynamic Memory Allocation)