# Programming in C
# Single Dimensional Array Questions

1. Write a program in C to declare a Single Dimensional Array of size 10 and accept values through the user and display the values.
2. Develop a program in C to accept 10 numbers in a Single Dimensional Array and display the minimum.
3. Create a program in C to accept 10 numbers in a Single Dimensional Array and display the maximum.
4. Develop a program in C to accept 5 numbers using a Single Dimensional Array and count all positive numbers and display the counted value.
5. Create a program in C to accept 8 numbers using a Single Dimensional Array and count all positive and negative numbers and display the counted value.
6. Write a program in C to accept 6 numbers using a Single Dimensional Array and count all even and odd numbers and display the counting value.
7. Develop a program in C to accept 10 numbers in a Single Dimensional Array and display the sum of even and odd numbers separately.
8. Create a program in C to accept 17 numbers in a Single Dimensional Array and print even numbers as a list and odd numbers as a separate list.
9. Write a program in C to accept individual runs of a complete cricket team and display the final score, mentioning which player has achieved a half-century, century, or just display the score.
10. Create a program in C to accept 10 numbers using a Single Dimensional Array, copy it to a second array, and print the second array.
11. Develop a program in C to accept 9 numbers using a Single Dimensional Array and print the array in reverse order.
12. Create a program in C to accept 7 numbers using a Single Dimensional Array, copy it to a second array in reverse order, and print the second array.
13. Develop a program in C to accept 5 numbers using a Single Dimensional Array and print the sum of all positive and negative numbers.
14. Create a program in C to accept 10 numbers using a Single Dimensional Array and print the sum of all even and odd numbers.
15. Develop a program in C to accept n numbers in a Single Dimensional Array and print the highest and the lowest numbers among them.
16. Create a program in C to accept n numbers in a Single Dimensional Array and display and count all positive even numbers and negative odd numbers.
17. Write a program in C to accept values of n size in two different arrays and store their sum index-wise in a third array.
18. Develop a program in C to accept values of n size in two different arrays and store their product index-wise in a third array.
19. Create a program in C to accept n values in two different arrays of the same size and store them in one single array.
20. Write a program in C to accept m and n values in two different arrays of different sizes and store them in one single array.
21. Develop a program in C to accept 5 numbers each in two different arrays and merge them in one single array of size 10.
22. Create a program in C to accept 5 numbers each in two different arrays, copy the first array in reverse order, and the second array as usual.
23. Write a program in C to accept n numbers in a Single Dimensional Array and copy it to another array in such a way that if the number is positive, then the copied number must be negative and vice versa.

24. Develop a program in C to accept n numbers in two different arrays and store them in one single array in cross-combed order.
25. **[LINEAR/ SEQUENTIAL SEARCH]** Create a program in C for linear search: accept n numbers from the user in a Single Dimensional Array and another number in a variable, then check if the number is present in the array or not.
26. Write a program in C to accept n numbers from the user in a Single Dimensional Array, accept another number in a variable, and print its frequency.
27. Develop a program in C to accept n numbers in a Single Dimensional Array and another number, then print the index number of all of its frequencies wherever found.
28. **[INSERTION]** Create a program in C for insertion: accept n values in a Single Dimensional Array, accept another number from the user, specify the position where the particular number needs to be inserted, and remove the remaining elements backward, causing the last value loss.
29. **[DELETION]** Write a program in C for deletion: accept n values in a Single Dimensional Array, accept a number from the array that needs to be deleted, and move the remaining elements to the front.
30. **[BUBBLE SORT]** Develop a program in C for bubble sort (ascending order): accept n values in a Single Dimensional Array from the user and arrange the numbers in ascending order.
31. **[BUBBLE SORT]**Create a program in C for bubble sort (descending order): accept n values in a Single Dimensional Array from the user and arrange the numbers in descending order.
32. **[BINARY SEARCH]** Write a program in C for binary search: accept n numbers from the user in a Single Dimensional Array and accept another number in a variable, then check if the number is present in the array or not.
33. **[SELECTION SORT]** Develop a program in C for selection sort (ascending order): accept n values in a Single Dimensional Array from the user and arrange the numbers in ascending order.
34. **[SELECTION SORT]** Create a program in C for selection sort (descending order): accept n values in a Single Dimensional Array from the user and arrange the numbers in descending order.
35. **[INSERTION SORT]** Write a program in C for insertion sort (ascending order): accept n values in a Single Dimensional Array from the user and arrange the numbers in ascending order.
36. **[INSERTION SORT]** Develop a program in C for insertion sort (descending order): accept n values in a Single Dimensional Array from the user and arrange the numbers in descending order.
37. Create a program in C to accept names of n students in a Single Dimensional Array and print them.

## HOTS Single Dimensional Array

38. Write a program in C to accept n numbers in an array and print all the Prime numbers and count them and print them.
39. Develop a program in C to accept n numbers in an array and print all the Palindrome numbers and count them and print them.
40. Create a program in C to accept n numbers in an array and print all the Armstrong numbers and count them and print them.
41. Write a program in C to accept n numbers in an array and print all the Automorphic numbers and count them and print them.
42. Develop a program in C to accept n numbers in an array and print all the Duck numbers and count them and print them.
43. Write a program in C to accept n numbers in an array and print all the Perfect numbers and count them and print them.
44. Develop a program in C to accept n numbers in an array and print all the Neon numbers and count them and print them.

45. Write a program in C to accept marks of Hindi, Science and Computers of Five Students in separate arrays and their names followed by calculating and storing their total and average in two different arrays and print them in matrix form.

## Double Dimensional Array

46. Create a program in c to declare and accept values in a Double Dimensional Array of size 3 x 4 and display them.
47. Develop a program in c to accept values in a Double Dimensional Array of size 4 x 3 and display them in matrix order.
48. Write a program in c to accept values in a Double Dimensional Array of size 4 x 5 and display the even, odd, positive and negative numbers separately.
49. Create a program in c to accept values in a Double Dimensional Array of size 5 x 3 and count and display the sum of even, odd, positive and negative elements.
50. Develop a program in c to accept values in a Double Dimensional Array of size 4 x 5 and copy it in another Double Dimensional Array and print the second Double Dimensional Array.
51. Write a program in c to accept values in a Double Dimensional Array of size 5 x 2 and display the sum of elements.
52. Create a program in c to accept values in a Double Dimensional Array of size 5 x 5 and display the product of elements.
53. Develop a program in c to accept values in a Double Dimensional Array of size n x n and display the sum of its top row elements.
54. Write a program in c to accept values in a Double Dimensional Array of size n x n and display the product of its bottom row elements.
55. Create a program in c to accept values in a Double Dimensional Array of size n x n and display the sum of its left column elements.
56. Develop a program in c to accept values in a Double Dimensional Array of size n x n and display the product of its right column elements.
57. Write a program in c to accept values in a Double Dimensional Array of size n x n and display the sum of its border elements.
58. Create a program in c to accept values in a Double Dimensional Array of size n x n and display the product of its borderless elements.
59. Develop a program in c to accept values in a Double Dimensional Array of size n x n and display the sum of its left diagonal elements.
60. Write a program in c to accept values in a Double Dimensional Array of size n x n and display the product of its right diagonal elements.
61. Create a program in c to accept values in a Double Dimensional Array of size 4 x 3 and copy it in another Double Dimensional Array in lateral inversion format and print the second Double Dimensional Array.
62. Develop a program in c to accept values in a Double Dimensional Array of size 4 x 3 and copy it in another Double Dimensional Array in vertical inversion format and print the second Double Dimensional Array.
63. **[LINEAR/ SEQUENTIAL SEARCH]** Write a program in c to accept n x m numbers from the user in an array and accept another number in a variable and check the number is present in the array or not.
64. Write a program in c to accept m x n numbers from the user in an array and accept another number in a variable and print its frequency.

# HOTS Double Dimensional Array

65. Write a program in c to accept n x n numbers in an array and print all the prime numbers and count them and print them.
66. Create a program in c to accept n x n numbers in an array and print all the palindrome numbers and count them and print them.
67. Develop a program in c to accept n x n numbers in an array and print all the armstrong numbers and count them and print them.
68. Write a program in c to accept n x n numbers in an array and print all the automorphic numbers and count them and print them.
69. Create a program in c to accept n x n numbers in an array and print all the duck numbers and count them and print them.
70. Develop a program in c to accept n x n numbers in an array and print all the perfect numbers and count them and print them.
71. Write a program in c to accept n x n numbers in an array and print all the neon numbers and count them and print them.

*** END OF ARRAY QUESTIONS ***