

Problems on Arrays

1. Define an Array and Explain Its Features.
2. What Are the Advantages and Disadvantages of Using Arrays?
3. Explain How Insertion and Deletion Work in Arrays.
4. What Is the Difference Between a 1D Array and a 2D Array?
5. Write a program in C to store elements in an array and print them.
Test Data :
Input 10 elements in the array :
element - 0 : 1
element - 1 : 1
element - 2 : 2
Expected Output :
Elements in array are: 1 1 2 3 4 5 6 7 8 9
6. Write a program in C to read n number of values in an array and display them in reverse order.
Test Data :
Input the number of elements to store in the array :3
Input 3 number of elements in the array :
element - 0 : 2
element - 1 : 5
element - 2 : 7
Expected Output :
The values store into the array are :
2 5 7
The values store into the array in reverse are :
7 5 2
7. Write a program in C to find the maximum and minimum elements in an array.
Test Data :
Input the number of elements to be stored in the array :3
Input 3 elements in the array :
element - 0 : 45
element - 1 : 25
element - 2 : 21
Expected Output :
Maximum element is : 45
Minimum element is : 21
8. Write a program in C to separate odd and even integers into separate arrays.
Test Data :
Input the number of elements to be stored in the array :5
Input 5 elements in the array :
element - 0 : 25
element - 1 : 47

element - 2 : 42

element - 3 : 56

element - 4 : 32

Expected Output :

The Even elements are :

42 56 32

The Odd elements are :

25 47

- 9.** Write a program in C to sort the elements of the array in descending order.

Test Data :

Input the size of array : 3

Input 3 elements in the array :

element - 0 : 5

element - 1 : 9

element - 2 : 1

Expected Output :

Elements of the array in sorted descending order:

9 5 1

- 10.** Write a program in C to insert the values in the array (sorted list).

Test Data :

Input number of elements you want to insert (max 100): 5

Input 5 elements in the array in ascending order:

element - 0 : 2

element - 1 : 3

element - 2 : 4

element - 3 : 7

element - 4 : 8

Input the value to be inserted : 5

The existing array list is :

2 3 4 7 8

After Insert the list is :

2 3 4 5 7 8