

## **Array Practice Questions**

1. C++ Program To Find Maximum Difference Between Two Elements in an Array.

```
Example Arr is {10, 15, 90, 200, 110};  
Max difference is 190
```

2. C++ Program to put even & odd elements of an array in 2 separate arrays.

```
Enter the size of array AR  
6  
Enter the elements of the array  
34  
56  
78  
90  
12  
39  
The elements of OAR are  
39  
The elements of EAR are  
34  
56  
78  
90  
12
```

3. C++ program to Insert an Element in the Sorted Array

```
Enter how many elements  
5  
Enter the elements  
76  
90  
56  
78  
12  
Input array elements are  
76  
90  
56  
78  
12  
Sorted list is  
12  
56  
76  
78  
90  
Enter the element to be inserted  
61  
Final list is  
12  
56  
61  
76  
78  
90
```

#### 4. C++ program to Delete an Element from an Array from kth index

##### Runtime Test Cases

**Testcase 1:** In this case, the index of the element to be deleted is "3"

```
Enter the size of the array: 5
Enter the elements of the array:
arr[0] = 8
arr[1] = 4
arr[2] = 9
arr[3] = 6
arr[4] = 2
Enter the index of the element to be deleted: 3
The array after deleting the element is: 8 4 9 2
```

**Testcase 2:** In this case, the index of the element to be deleted is "6"

```
Enter the size of the array: 4
Enter the elements of the array:
arr[0] = 10
arr[1] = 4
arr[2] = 6
arr[3] = 1
Enter the index of the element to be deleted: 6
Deletion is not possible in the array.
```

#### 5. C++ Program to Cyclically Permute the Elements of an Array

```
Enter the value of the n = 4
Enter the numbers
3
40
100
68
Cyclically permuted numbers are given below
40
100
68
3
```

#### 6. C++ Program to Print all Non Repeated Elements in an Array

```
Enter size of the array: 6
Enter 6 elements of an array: 12
10
4
10
12
56
The array after removing duplicates is: 12 10 4 56
```

### 7. C++ Program to Find Missing Numbers in Array

```
Enter elements into array :
1
2
3
5
6
Missing element is : 4
```

### 8. C++ Program to Find Missing Numbers in an Array of Size N-1 with Numbers[1,N]

```
enter the range of array
9
enter a[0]element into the array:1
enter a[1]element into the array:5
enter a[2]element into the array:2
enter a[3]element into the array:7
enter a[4]element into the array:3
enter a[5]element into the array:4
enter a[6]element into the array:10
enter a[7]element into the array:9
enter a[8]element into the array:6
The missing number -> 8
```

### 9. C++ Program to Find Odd Occurring Elements in an Array

### 10. C++ Program to Find Mode of an Array

```
Enter the limit
10
Enter the set of numbers
1 2 2 3 4 5 5 6 7 8
Mode      = 2 5
```

### 11. C++ Program to Split the Array and Add First Part to the End

```
Enter the value of n
4
enter the numbers
3
678
345
876
Enter the position of the element to split the array
3
The resultant array is
876
3
678
345
```

#### 12. C++ Program to Segregate 0s and 1s in an Array

```
Original array = {0, 1, 0, 1, 1, 0}  
segregated array is 0 0 0 1 1 1
```

#### 13. C++ Program to Find the Largest Sum of Contiguous Subarray of an Array

```
Type the length of the array  
8  
type the elements of the array  
-1  
-5  
5  
3  
-2  
5  
4  
1  
  
The largest contiguous subarray is 5 3 -2 5 4 1  
The sum of the largest contiguous subarray is 16
```

#### 14. C++ Program to Merge Two Sorted Array Elements

```
Enter the size of the first array: 3  
Enter the elements of the first array:  
12  
18  
23  
Enter the size of the second array: 3  
Enter the elements of the second array:  
13  
19  
27  
The merged array is:  
12 13 18 19 23 27
```

#### 15. C++ Program to Print all Repeated Elements with Frequency in an Array

```
Array {5, 10, 10, 2, 1, 4, 2};  
duplicate elements present in the given array are 10 2
```