#1. Given an array arr[] of size n, the task is to find the largest element in the given array.

```
[12,15,2,19,5]
```

#2. find the Second largest element in the given array.

#3.Check if the Array is Sorted: We are given an array containing n elements. Our task is to check whether the array is sorted in ascending (non-decreasing/increasing) order or not.

```
[3,7,15,60,90,99]
```

#4.Our Task: Given an array (or string), the task is to reverse the array.

Examples:

Input : $arr[] = \{1, 2, 3\}$

Output: $arr[] = \{3, 2, 1\}$

Input: $arr[] = \{4, 5, 1, 2\}$

Output: $arr[] = \{2, 1, 5, 4\}$

#5.Remove Duplicates from a Sorted Array !!!

Our Task: Given a sorted array, the task is to remove the duplicate elements from the array.

Ex1:

Input : $arr[] = \{2, 2, 2, 2, 2\}$

Output: $arr[] = \{2\}$

new size = 1

Ex2:

Input : $arr[] = \{1, 2, 2, 3, 4, 4, 4, 5, 5\}$

Output: $arr[] = \{1, 2, 3, 4, 5\}$

new size = 5

#6. Move Zeros to End!!!

Our Task: Given a sorted array, the task is to remove the duplicate elements from the array.

Examples:

Input: $arr[] = \{1, 2, 0, 0, 0, 3, 6\}$

Output: 1 2 3 6 0 0 0

Input: $arr[] = \{0, 1, 9, 8, 4, 0, 0, 2, 7, 0, 6, 0, 9\}$

Output: 198427690000

#7 Left Rotate an Array by One !!!

Our Task: Given an array, the task is to Left Rotate an Array by One.

What is meant by the Left Rotation of an Array by One?

Left Rotation means a rotation that happens Counter-Clockwise (anticlockwise). The elements are moved counterclockwise by one, which results in the elements moving back by one position from their initial position.

Example:

Input: $arr[] = \{1,2,3,4,5\}$

Output: $arr[] = \{2,3,4,5,1\}$

Input: $arr[] = {30,5,20}$

Output: $arr[] = \{5,20,30\}$

#8. Left Rotate an Array by D Places !!!

Our Task: Given an array, the task is to Left Rotate an Array by D places.

What is meant by the Left Rotation of an Array by D places?

Left Rotation means a rotation that happens Counter-Clockwise (anticlockwise). The elements are moved counterclockwise by D number of places, which results in the elements moving back by D positions from their initial position.

Examples:

Input: $arr[] = \{1, 2, 3, 4, 5, 6, 7\}, d = 2$

Output: 3 4 5 6 7 1 2

Input: $arr[] = \{3, 4, 5, 6, 7, 1, 2\}, d=2$

Output: 5671234

#9 Find the Leaders in an Array !!!

Our Task: Given an array, the task is to write a program to print all the LEADERS in the array.

What is a Leader?

An element is a leader if it is greater than all the elements to its right side. And the rightmost element is always a leader.

For example:

Input: $arr[] = \{16, 17, 4, 3, 5, 2\},\$

Output: 17, 5, 2

Input: $arr[] = \{1, 2, 3, 4, 5, 2\},\$

Output: 5, 2

#10: Maximum Difference Problem with Order !!!

Our Task: Given an array arr[] of integers, find out the maximum difference between any two elements such that the larger element appears after the smaller number.

Examples:

Input: arr = $\{2, 3, 10, 6, 4, 8, 1\}$

Output:8

Explanation: The maximum difference is between 10 and 2.

Input: $arr = \{7, 9, 5, 6, 3, 2\}$

Output: 2

Explanation: The maximum difference is between 9 and 7.