

## Quick check:

**What is Leader in a Array?**

**Ans.**

**A leader in a array is an element which is greater than all the element on it's right side in the array.**

**Just Like the example of the array:**

**Int []Arr=new int [7]**

**Arr[7]={1,27,12,20,12,6,5};**

<b>1</b>	<b>27</b>	<b>12</b>	<b>20</b>	<b>12</b>	<b>6</b>	<b>5</b>
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**1<27,12,20,12,6,5**

**So it is not greater than it's right element, 1 is not a Leader here**

**But for the case of 27**

**27>12,20,12,6,5**

**So 27 is obviously Leader here**

**Similarly**

**20>12,6,5**

**12>6,5**

**6>5**

**And no other right element is available for the case of 5**

**So the leaders are 27,20,12,6,5.**

**Coder Logic:**

**At first we execute the size of the array , end input the array element,**

```

System.out.println("Finding Leader in a Array!");
System.out.println("The array size is:");
int s = cc.nextInt();/* declare s here to determined
the size of the array by user choice*/
int[] arr = new int[s];
System.out.println("The array elements are:");
for (int i = 0; i < s; i++) {
    arr[i] = cc.nextInt();/*
This operation going to print the array element by
user choice : like
Arr[0]=90;
Arr[1]=100;
Arr[2]=34;
...
Arr[s-1]=75;*/
}

```

**Now in a for loop loop runs up to s value we are initialize**

**Large** variable;

**Large=arr[i];**

**To check the taken element is grater than it,s right element or not.**

```

System.out.println("The Leaders are:\n");
for (int i = 0; i < s; i++) {
    int largest = arr[i];/* lets take the example of 21
Large=21;
    for (int j = i; j < s; j++) {
        if (arr[j] > largest)
        {\if(12>20),if(20>21),if(12>21),if(6>21),if(5>21),all
condition false so
        largest = arr[j];
    }
}
    if (arr[i] == largest) {//here, 21=21 condition true ,
Print 21
        System.out.println(arr[i]);
    }
}

```

**But for the case of first 12;**

```

System.out.println("The Leaders are:\n");
for (int i = 0; i < s; i++) {
    int largest = arr[i]; //largest=12;
    for (int j = i; j < s; j++) {
        if (arr[j] > largest) {\\if(20>12); condition true now large=20;
            largest = arr[j];
        }
    }
    if (arr[i] == largest) {\\here 20!=12 , prints nothing
        System.out.println(arr[i]);
    }
}

```

## And for the odd loop logic case:

```

Scanner cc=new Scanner(System.in);
int k=3;\\initialize k value at random, except zero(0)
while(k!=0) {

```

## Initialize at first k value at random , if k!=0, loop continue

```

System.out.println("do you want's to check another Array element\n if yes
press any number except zero(0)");
System.out.println("you have entered:");
k = cc.nextInt();//this is the continue operation if k!=0 loop will be
continue
if (k != 0) {
    System.out.println("Yes, why not!");
} else {
    System.out.println("no thanks");
}

```

## 1.Find the leaders in an Array (c programming):

/write a program to print all Leader in the Array.

```
#include<stdio.h>
```

```
int main()
```

```
{
```

```
    int size,i,j,temp=0,Largest,count;
```

```
    printf("The array size is:");
```

```
    scanf("%d",&size);
```

```
    int arr[size];
```

```
    printf("The array elements are:\n");
```

```
    for(i=0;i<size;i++)
```

```
    {
```

```
        scanf("%d",&arr[i]);
```

```

    }
    printf("the leaders are :\n");
    for(i=0;i<size;i++)
    {
        Largest=arr[i];
        for(j=i;j<size;j++)
        {
            if(arr[j]>Largest)
            {
                Largest=arr[j];
            }
        }
        if(arr[i]==Largest)
        {
            printf("%d\t",arr[i]);
        }
    }
}

```

## 1.Find the leaders in an Array and use a odd Loop also (java programming):

```

import java.util.Scanner;

public class Array_14_LeaderInArray {
    public static void main(String[] args) {
        Scanner cc=new Scanner(System.in);
        int k=3;
        while(k!=0) {
            System.out.println("Finding Leader in a Array!");
            System.out.println("The array size is:");
            int s = cc.nextInt();
            int[] arr = new int[s];

```

```

        System.out.println("The array elements are:");
        for (int i = 0; i < s; i++) {
            arr[i] = cc.nextInt();
        }

        System.out.println("The Leaders are:\n");
        for (int i = 0; i < s; i++) {
            int largest = arr[i];
            for (int j = i; j < s; j++) {
                if (arr[j] > largest) {
                    largest = arr[j];
                }
            }
            if (arr[i] == largest) {
                System.out.println(arr[i]);
            }
        }
    }
}

```

```

        System.out.println("do you want's to check another Array element\n if yes press any
number except zero(0)");

        System.out.println("you have entered:");
        k= cc.nextInt();
        if(k!=0)
        {
            System.out.println("Yes, why not!");
        }
        else
        {
            System.out.println("no thanks");
        }
    }
}
}

```

## Code Logic->

```
import java.util.Scanner;
public class Array_14_LeaderInArray {
    public static void main(String[] args) {
        Scanner cc=new Scanner(System.in);
        int k=3;
        while(k!=0) {
            System.out.println("Finding Leader in a Array!");
            System.out.println("The array size is:");
            int s = cc.nextInt();
            int[] arr = new int[s];
            System.out.println("The array elements are:");
            for (int i = 0; i < s; i++) {
                arr[i] = cc.nextInt();
            }
            System.out.println("The Leaders are:\n");
            for (int i = 0; i < s; i++) {
                int largest = arr[i];
                for (int j = i; j < s; j++) {
                    if (arr[j] > largest) {
                        largest = arr[j];
                    }
                }
                if (arr[i] == largest) {
                    System.out.println(arr[i]);
                }
            }

            System.out.println("do you want's to check another
Array element\n if yes press any number except zero(0)");
            System.out.println("you have entered:");
            k= cc.nextInt();
            if(k!=0)
            {
                System.out.println("Yes, why not!");
            }
            else
            {
                System.out.println("no thanks");
            }
        }
    }
}
```