1)Count even and odd numbers in array

Assignment -30/07/2018

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import java.util.Scanner;

public class CntEvenOdd {

private static Scanner sc;

/\*\*

\* @param args

\*/

public static void main(String[] args) {

// TODO Auto-generated method stub

int even=0,odd=0;

System.out.println("How many Elements You wants to add?? ");

sc = new Scanner(System.in);

int n=sc.nextInt();

int arr[]=new int[n];

for(int i=0;i<n;i++)

{

arr[i]=sc.nextInt();

if(arr[i]%2==0)

even++;

if(arr[i]%2!=0)

odd++;

}

System.out.println("Even Count:"+even+"\todd count: "+odd);

}

}

OUTPUT:

Time Complexity: n+5

How many Elements You wants to add??

10

Enter elements:

44 33 54 0 67 5 34 23 32 04

Even Count:6 odd count: 4

2)Display array in descending order

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import java.util.Scanner;

public class SortingBubble

{

private static Scanner sc;

/\*\*

\* @param args

\*/

public static void main(String[] args) {

// TODO Auto-generated method stub

int even=0,odd=0;

System.out.println("How many Elements You wants to eter ?? ");

sc = new Scanner(System.in);

int n=sc.nextInt();

int arr[]=new int[n];

System.out.println("Enter elements:");

for(int i=0;i<n;i++)

{

arr[i]=sc.nextInt();

}

System.out.println("Before sorting:");

for(int i=0;i<n;i++)

System.out.print(arr[i]+"\t");

for(int i=0;i<arr.length;i++)

{

for(int j=0;j<arr.length-1;j++)

{

if(arr[j]<arr[j+1])

{

int temp=arr[j];

arr[j]=arr[j+1];

arr[j+1]=temp;

}

}

}

System.out.println("\nAfter sorting:");

for(int i=0;i<n;i++)

System.out.print(arr[i]+"\t");

}

}

OUTPUT:

Time Complexity: n\*(n-1)

How many Elements You wants to eter ??

10

Enter elements:

44 33 54 0 67 5 34 23 32 04

Before sorting:

44 33 54 0 67 5 34 23 32 4

After sorting:

67 54 44 34 33 32 23 5 4 0

3)MIN and Max values from array

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import java.util.Scanner;

public class MIN\_MAX{

private static Scanner sc;

/\*\*

\* @param args

\*/

public static void main(String[] args) {

// TODO Auto-generated method stub

System.out.println("How many Elements You wants to eter ?? ");

sc = new Scanner(System.in);

int n=sc.nextInt();

int arr[]=new int[n];

System.out.println("Enter elements:");

for(int i=0;i<n;i++)

{

arr[i]=sc.nextInt();

}

int MIN=arr[0];

int MAX=arr[0];

for(int i=0;i<arr.length;i++)

{

if(arr[i]>MAX)MAX=arr[i];

if(arr[i]<MIN)MIN=arr[i];

}

System.out.println("\nMIN::"+MIN+"\t MAX::"+MAX);

}

}

OUTPUT:

How many Elements You wants to eter ??

10

Enter elements:

44 33 54 3 67 5 34 23 32 04

MIN::3 MAX::67

**4)Union of two arrays**

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**//import** java.io.IOException;

**import** java.util.Scanner;

**public** **class** Union{

**private** **static** Scanner *sc*;

**public** **static** **void** main(String args[]) **throws** IOException {

*sc*=**new** Scanner(System.***in***);

System.***out***.println("How namy elements u wants to add in First Array???");

**int** m=*sc*.nextInt();

System.***out***.println("How namy elements u wants to add in First Array???");

**int** n=*sc*.nextInt();

**int** k=m;

**int** f=0;

**int** a[]=**new** **int**[m];

**int** b[]=**new** **int**[n];

**int**[] c=**new** **int**[m+n];

**int**[] d=**new** **int**[m];

System.***out***.println("Enter First Array Elements:\n");

**for**(**int** i=0;i<m;i++)

a[i]=*sc*.nextInt();

System.***out***.println("Enter Second Array Elements:\n");

**for**(**int** i=0;i<n;i++)

b[i]=*sc*.nextInt();

//copy contents of array-1 to array-3

**for**(**int** i=0;i<m;i++)

c[i]=a[i];

//Finding union array

**for**(**int** i=0;i<n;i++)

{

**for**(**int** j=0;j<m;j++)

**if**(b[i]!=a[j])

{

f=1;

}

**else** {

f=0;

**break**;

}

**if**(f==0)

{

c[k]=b[i];

}

}

System.***out***.print("Union of Two Arrays::");

**for**(**int** i = 0; i < k - 1; i++)

{

System.***out***.print(c[i]+",");

}

System.***out***.println("-------------------------------------------------------");

// Runtime.*getRuntime*().exec("cls");

}

}

OUTPUT::

1 2 3 4 5 6 6 7 8 9

Enter Second Array Elements:

1 2 0 67

Union of Two Arrays::1,2,3,4,5,6,6,7,8,

5)Union two Array vales

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**import** java.util.Scanner;

// Java program to find union of

// two sorted arrays

// Java program to find union of two

// sorted arrays (Handling Duplicates)

**class** Union

{

**static** **void** unionArray(**int** arr1[],**int** arr2[])

{

// Taking max element present in either array

**int** m = arr1[arr1.length - 1];

**int** n = arr2[arr2.length - 1];

**int** ans = 0;

**if**(m > n)

{

ans = m;

}

**else**

ans = n;

// Finding elements from 1st array

// (non duplicates only). Using

// another array for storing union

// elements of both arrays

// Assuming max element present

// in array is not more than 10^7

**int** newtable[] = **new** **int**[ans + 1];

// First element is always

// present in final answer

System.***out***.println("\n\n-----Union Array Values--------------------");

System.***out***.print(arr1[0] + " ");

// Incrementing the First element's count

// in it's corresponding index in new table

++newtable[arr1[0]];

// Starting traversing the first

// array from 1st index till last

**for**(**int** i = 1; i < arr1.length; i++)

{

// Checking whether current element

// is not equal to it's previous element

**if**(arr1[i] != arr1[i - 1])

{

System.***out***.print(arr1[i] + " ");

++newtable[arr1[i]];

}

}

// Finding only non common

// elements from 2nd array

//System.out.println("");

**for**(**int** j = 0; j < arr2.length; j++)

{

// By checking whether it's already

// present in newtable or not

**if**(newtable[arr2[j]] == 0)

{

System.***out***.print(arr2[j] + " ");

++newtable[arr2[j]];

}

}

System.***out***.println("\n----------------------------------");

}

// Driver Code

**public** **static** **void** main(String args[])

{

Scanner s=**new** Scanner(System.***in***);

**int** i;

System.***out***.println("Enter no. of elements you want in first array:");

**int** m = s.nextInt();

System.***out***.print("Enter no. of elements you want in second array:");

**int** n = s.nextInt();

**int** arr1[] = **new** **int** [m];

**int** arr2[] = **new** **int**[n];

System.***out***.println("Enter all the elements in first array:");

**for**(i = 0; i < m; i++)

{

arr1[i] = s.nextInt();

}

System.***out***.println("Enter all the elements in second array:");

**for**(i = 0; i < n; i++)

{

arr2[i] = s.nextInt();

}

*unionArray*(arr1, arr2);

}

}

/\*OUTPUT::

Enter no. of elements you want in first array:10

Enter no. of elements you want in second array:4

Enter all the elements in first array:

1 2 3 4 5 6 6 7 8 9

Enter all the elements in second array:

1 2 0 67

-----Union Array Values--------------

1 2 3 4 5 6 7 8 9 0 67

----------------------------------

\*/

6) Display true if array start or end with 6 else print false

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**class** ConditionArray

{

// Driver Code

**public** **static** **void** main(String args[])

{

Scanner s=**new** Scanner(System.***in***);

**int** i;

**boolean** flag;

System.***out***.println("Enter no. of elements you want in first array:");

**int** m = s.nextInt();;

**int** arr1[] = **new** **int** [m];

System.***out***.println("Enter all the elements in array:");

**for**(i = 0; i < m; i++)

{

arr1[i] = s.nextInt();

}

**if**(arr1[0]==6 || arr1[m-1]==6)

flag=**true**;

**else**

flag=**false**;

System.***out***.println("Array contain 6 at first or last :: "+flag);

}

}

/\*OUTPUT::

1)

Enter no. of elements you want in first array:

10

Enter all the elements in first array:

1 2 3 4 5 6 6 7 8 9

Array contain 6 at first or last :: false

2)

Enter no. of elements you want in first array:

10

Enter all the elements in array:

1 2 3 4 5 6 6 7 6 6

Array contain 6 at first or last :: true

3)

Enter no. of elements you want in first array:

10

Enter all the elements in array:

6 2 3 4 5 6 6 7 6 6

Array contain 6 at first or last :: true

4)

Enter no. of elements you want in first array:

10

Enter all the elements in array:

6 2 3 4 5 6 6 7 6 6 0

Array contain 6 at first or last :: true

\*/