CS261 LAB2

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Task 1: Write A Program to copy all elements of one array into another array.

Solution code:

```
package Lab 2;
import java.util.*;
public class CopyingArray {
   public static void main(String[] args){
       Scanner sc= new Scanner(System.in);
       System.out.println("How many elements do you want in your array ->");
                                                 //n= no. of elements in array
        int n= sc.nextInt();
        int[] a= new int[n];
                                                 //a[]= input array
        System.out.println("Original array -");
        for (int i=0; i<n; i++) {
            a[i] = sc.nextInt();
            System.out.print(a[i]+"->");
        System.out.println();
                                                  //copied array
        int[] b= new int[n];
        System.out.println("Copied array -");
        for (int i=0; i<n;i++){</pre>
                                                  //main step for copying
            b[i]=a[i];
            System.out.print(b[i]+"->");
```

OUTPUT:

```
"C:\Program Files\Java\jdk-18.0.1\bin\java.exe" "-javaagent:C:\IntelliJ IDEA Community Edition 2022.1\lib\idea_rt.jar=63030:C:\IntelliJ How many elements do you want in your array ->

4

Original array -

1 4 6 3

1->4->6->3->

Copied array -

1->4->6->3->
```

Task 2: Write A Program to find largest number in set of integers (take user input).

Solution Code:

```
import java.util.*;
public class largeint {
    Run | Debug
    public static void main(String[] args) {
        Scanner sc=new Scanner(System.in);
                                                             //initializing Scan
        System.out.println(x: "Enter number of elements:");
        int N=sc.nextInt();
                                                             //scanning input of number of elements
        int[] A= new int[N];
                                                             //creating new array
        for(int i=0;i<N;i++){</pre>
                                                             // scanning elemnts of array
            A[i]=sc.nextInt();
                                                             //lets assume 1st element be largest
        int large=A[0];
        for(int i=0;i<N;i++){</pre>
                                                             //running a for loop lets compare each other
                                                             //with 1st one.If 1st one is greater than other
            if(large<=A[i]){</pre>
                                                             //it remains largest otherwise compared element
                large= A[i];
                                                             //is largest
        System.out.println(x: "The largest number is:");
        System.out.println(large);
                                                             //printing the largest number
        sc.close();
```

OUTPUT:

```
PS D:\Java\OOPCS261> cd "d:\Java\OOPCS261\" ; if ($?) { javac largeint.java } ; if ($?) { java largeint } Enter number of elements:
4
32 45 56 43
The largest number is:
56
```