

Day 54 coding Statement : Given an integer array of size N. Write Program to find whether Arrays are disjoint or not. Two arrays are said to be disjoint if they have no elements in common.

Sample input 1: Enter Array 1 Length = 4

Enter Array Elements = 2 -4 -1 -3

Enter Array 2 Length = 3

Enter Array elements = 1 3 5

Sample output 1: Disjoint

Sample input 2: Enter Array 1 Length = 5

Enter Array Elements = 1 5 -7 6 3

Enter Array 2 Length = 4

Enter Array elements = 2 4 6 8

Sample output 2: Not disjoint. (6 is common)

Program:

```
package com.talentbattle.codingchallenge;

import java.util.Scanner;

public class Array_disjoint {

    public static void main(String[] args) {
        // TODO Auto-generated method stub
        Scanner scan = new Scanner(System.in);
        System.out.println("Enter Array 1 Length");
        int n1=scan.nextInt();
        int arr1[]= new int[n1];
        System.out.println("Enter the Array 1 Elements");
        for(int i=0;i<n1;i++) {
            arr1[i]=scan.nextInt();
        }
        System.out.println("Enter Array 2 Length");
        int n2=scan.nextInt();
        int arr2[]=new int[n2];
        System.out.println("Enter the Array 2 Elements");
        for(int i=0;i<n2;i++) {
            arr2[i]=scan.nextInt();
        }

        int count=0;
        for(int i=0;i<n1;i++) {
```

```

        for(int j=0;j<n2;j++) {
            if(arr1[i]==arr2[j]) {
                count++;
            }
        }
    }
    if(count==0) {
        System.out.println("Disjoint");
    }
    else {
        System.out.println("Not Disjoint");
    }
}
}

```

The screenshot shows the Eclipse IDE with the following components:

- Project Explorer:** A list of Java files in the project 'com.talentbattle.codingchallenge'. The file 'Array_disjoint.java' is selected.
- Editor:** The source code of 'Array_disjoint.java' is displayed. It includes imports for 'java.util.Scanner' and a 'main' method that takes two arrays as input and checks if they are disjoint.
- Console:** The output of the program is shown. It prompts the user to enter the length and elements of two arrays. The input provided was:


```

Enter Array 1 Length
5
Enter the Array 1 Elements
1 5 6 7 8
Enter Array 2 Length
4
Enter the Array 2 Elements
2 4 6 8
Not Disjoint
      
```

