binary search.java

Saved

```java
//Answer for question 5
import java.util.Scanner;
class BinarySearch
{
   public static void main(String args[])
   {
      int counter, num, item, array[], first, la
      //To capture user input
      Scanner input = new Scanner(System.in);
      System.out.println("B.JayaLakshmi");
      System.out.println("51834667");
      System.out.println("Enter number of elemer
      num = input.nextInt();
     //Creating array to store the all the numbe
      array = new int[num];
     System.out.println("Enter " + num + " integ
      //Loop to store each numbers in array
      for (counter = 0; counter < num; counter++
          array[counter] = input.nextInt();
        System.out.println("Enter the search val
      item = input.nextInt();
      first = 0;
      last = num - 1;
      middle = (first + last)/2;
     while( first <= last )
      {
         if ( array[middle] < item )
           first = middle + 1;
         else if ( array[middle] == item )
         {
           System.out.println(item + " found at
           break;
         }
         else
         {
             last = middle - 1;
         }
         middle = (first + last)/2;
      }
      if ( first > last )
          System.out.println(item + " is not fou
   }
}
```

Make public

```
B.JayaLakshmi
51834667
Enter number of elements:
5
Enter 5 integers
5
9
100
67
54
Enter the search value:
9
9 found at Index 2.

Process finished.
```

zero and one.java

Saved

```java

//Answer for question 2
import java.util.Arrays;

public class Main
{
    private static void sortBinaryArray(int[] in
    {
        int zeroCount = 0;

        System.out.println("B.JayaLakshmi\nSAP I
        System.out.println("Input Array Before S


        for (int n = 0; n < inputArray.length; n
        {
            if (inputArray[n] == 0)
            {
                zeroCount++;
            }
        }


        for (int n = 0; n < zeroCount; n++)
        {
            inputArray[n] = 0;
        }


        for (int n = zeroCount; n < inputArray.l
        {
            inputArray[n] = 1;
        }

        System.out.println("Input Array After So
    }

    public static void main(String[] args)
    {
        sortBinaryArray(new int[] {1, 0, 1, 1, 0
    }
}
```

File info

```
B.JayaLakshmi
SAP ID:51834667
Input Array Before Sorting : [1, 0, 1, 1,
Input Array After Sorting : [0, 0, 0, 1,

Process finished.
```

disarium.java

Saved

```java
import java.io.*;
public class Disarium
    {
    public static void main(String[] args)throws
        {
            BufferedReader br=new BufferedReade
            System.out.println("B.JayaLakshmi\n
            System.out.print("Enter a number :
            int n = Integer.parseInt(br.readLin
            int copy = n, a = 0, sum = 0;
            String b = Integer.toString(n);
            int len = b.length();

            while(copy>0)
            {
                a = copy % 10;
                sum = sum + (int)Math.pow(a,len
                len--;
                copy = copy / 10;
            }

            if(sum == n)
                System.out.println(n+" is a Dis
            else                    println(n+" is not a
```

```
B.JayaLakshmi
SAP ID:51834667
Enter a number : 9
9 is a Disarium Number.

Process finished.
```