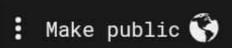
```
//1st Answer
import java.util.Scanner;
class Main
{
    public static boolean disariumNumber(int num
    {
        int copy = num, d = 0, sum = 0;
        String s = Integer.toString(num);
        int len = s.length();
        while(copy>0)
        {
            d = copy \% 10;
            sum = sum + (int)Math.pow(d,len);
            len--;
            copy = copy / 10;
        }
        if(sum==num)
        {
            return true;
        }
        else
        {
            return false;
        }
    }
    public static void NdisariumNumber(int count
        int c=0;
        for(int i=1;i<1000;i++)
            if(disariumNumber(i))
            {
                System.out.print(i+" ");
                 C++;
            }
            if(c==count)
            {
                 break;
            }
        }
    public static void disariumNumber(int num1,
    {
        int c=0;
        for(int i=num1;i<=num2;i++)</pre>
 Make public 🕞 lisariumNumber(i))
```

```
System.out.print(i+" ");
                   C++;
               }
           }
       public static void main (String[] args) {
           Scanner sc=new Scanner(System.in);
           System.out.println("Rahul \nSAPID:518345
           System.out.print("Enter a number: ");
           int num=sc.nextInt();
           if(disariumNumber(num))
           {
               System.out.println(num+" is a disari
           }
           else
           {
               System.out.println(num+" is not a di
66
           }
           System.out.println("\nEnter number of di
           int n=sc.nextInt();
           System.out.println("Here are your "+n+"
           NdisariumNumber(n);
           System.out.print("\nEnter from where to
           int num1=sc.nextInt();
           System.out.print("Enter till where we ha
           int num2=sc.nextInt();
           System.out.println("Here are your disari
           if(num1<num2)
           disariumNumber(num1, num2);
           else
           disariumNumber(num2, num1);
80 }
81 }
```





## × Terminal

Rahul

SAPID:51834543

Enter a number: 3

3 is a disarium Number.

Enter number of disarium Numbers you want

Here are your 9 disarium Numbers..

1 2 3 4 5 6 7 8 9

Enter from where to start check: 5

Enter till where we have to check: 9

Here are your disarium Numbers between 5 am

5 6 7 8 9

Process finished.

```
//2Nd Answer
import java.util.Scanner;
class Main{
    public static int[] binarySort(int[]a,int n)
    {
        int temp;
        for(int i=0;i<n;i++)</pre>
            for(int j=i+1; j<n; j++)
                 if(a[i]>=a[j])
                 {
                     temp=a[i];
                     a[i]=a[j];
                     a[j]=temp;
                 }
            }
        return a;
    public static void main (String[] args) {
        Scanner sc=new Scanner(System.in);
        System.out.print("Enter size of the arra
        int n=sc.nextInt();
        int[]a=new int[n];
        System.out.println("Enter "+n+" elements
        for(int i=0;i<n;i++)
            a[i]=sc.nextInt();
            if(a[i]!=0\&&a[i]!=1)
                 System.out.println("Enter only
                 a[i]=sc.nextInt();
            }
        a=binarySort(a,n);
        System.out.println("\nBinary array afte
        for(int i=0;i<8;i++)
            System.out.print(a[i]+" ");
     System.out.println("Rahul Java2 51834543");
```



```
// 3rd Answer
  import java.util.*;
  import java.lang.*;
  class Replace
  {
  static int replaceDigit(int x, int d1,
                                   int d2)
  {
       int result = 0, multiply = 1;
      while (x \% 10 > 0)
      {
           int remainder = x \% 10;
           if (remainder == d1){
               result = result + d2 * multiply;
           else {
               result = result + remainder * multip
    }
           multiply *= 10;
           x = x / 10;
       }
      return result;
25 public static void main(String[] args)
  {
    Scanner sc=new Scanner(System.in);
    System.out.println("Enter a number:");
       int x =sc.nextInt();
    System.out.println("enter which no you replace
     int d1 =sc.nextInt();
    System.out.println("enter the number to get re
    int d2 =sc.nextInt();
       System.out.println(replaceDigit( x, d1, d2))
       System.out.println("Rahul Java2 51834543");
37 }
```



```
× Terminal
Enter a number:
945
enter which no you replace:
enter the number to get replaced:
944
Rahul Java2 51834543
Process finished.
```

```
//5th Answer
   public class Main
     public static int binarySearch(int[] M, int le
     {
       if (left > right) {
         return -1;
       }
       int mid = (left + right) / 2;
       if (n == M[mid]) {
         return mid;
       }
       else if (n < M[mid]) {
         return binarySearch(M, left, mid - 1, n);
       }
       else {
         return binarySearch(M, mid + 1, right, n);
       }
     }
     public static void main(String[] args)
       int[] M = \{9,7,2,5,6\};
       int key = 2;
       int left = 0;
       int right = M.length - 1;
       int index = binarySearch(M, left, right, key
       System.out.println("Rahul \nSAPID:51834543")
       if (index != -1) {
         System.out.println("Element found at index
       } else {
         System.out.println("Element not found in t
     }
43 }
```

## × Terminal Rahul SAPID:51834543 Element found at index 2 Process finished.