```java
import java.io.*;
public class Main
    {
    public static void main(String[] args)throws
        {
            BufferedReader br=new BufferedReader
            System.out.println("Author:M.Bhrath
            System.out.print("Enter a number : "
            int n = Integer.parseInt(br.readLine
            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 Disa
            else
                System.out.println(n+" is not a
        }
    }
```

Terminal

```
Author:M.Bhrath Chandra
SAP ID:51834556
Enter a number : 5
5 is a Disarium Number.

Process finished.
```

```
5  tic void sortBinaryArray(int[] inputArray)
6
7   Count = 0;
8
9   ut.println("Author:M.Bharath Chandra\nSAP ID:518
10  ut.println("Input Array Before Sorting : "+Array
11
12
13   n = 0; n < inputArray.length; n++)
14
15 .nputArray[n] == 0)
16
17 ɜroCount++;
18
19
20
21
22   n = 0; n < zeroCount; n++)
23
24 :Array[n] = 0;
25
26
27
28   n = zeroCount; n < inputArray.length; n++)
29
30 :Array[n] = 1;
31
32
33  ut.println("Input Array After Sorting : "+Arrays
34
35
36  ic void main(String[] args)
37
38  ryArray(new int[] {1, 0, 1, 1, 0, 1, 0, 0});
39
```

Terminal

```
Author:M.Bharath Chandra
SAP ID:51834556
Input Array Before Sorting : [1, 0, 1, 1,
Input Array After Sorting : [0, 0, 0, 0, 1

Process finished.
```

```java
public class Main
{
static int replaceDigit(int a, int numbertoberep
                        int replacingnumber)
{
    int result = 0, multiply = 1;

    while (a % 10 > 0)
    {

        int remainder = a % 10;

        if (remainder == numbertobereplaced)
            result = result + replacingnumber * mu

        else
            result = result + remainder * multiply

        multiply *= 10;
        a = a / 10;
    }
    return result;
}

public static void main(String[] args)
{
    int a = 645, numbertobereplaced = 6, replacir
    System.out.println("Author:M.Bharath Chandra\
    System.out.println(replaceDigit(a, numbertobe
}
}
```

Terminal

```
Author:M.Bharath Chandra
SAP ID:51834556
545

Process finished.
```

```
 return -1;
}

mid = (left + right) / 2;

n == M[mid]) {
return mid;


 if (n < M[mid]) {
return binarySearch(M, left, mid - 1, n);


 {
return binarySearch(M, mid + 1, right, n);


static void main(String[] args)

] M = { 2, 5, 6, 8, 9, 10 };
key = 3;

left = 0;
right = M.length - 1;

index = binarySearch(M, left, right, key);

em.out.println("Author:M.Bharath Chandra\nSAP ID
index != -1) {
ystem.out.println("Element found at index " + in
se {
ystem.out.println("Element not found in the arra
}
```

Terminal

```
Author:M.Bharath Chandra
SAP ID: 51834556
Element not found in the array

Process finished.
```