```java
import java.io.*;
public class Main{
    private int num;
    private int size;
    public Main(int x){
        num = x;
        size = 0;
    }
    void countDigit(){
        for(int m = num; m != 0; m /= 10)
            size++;
    }
    public int sumOfDigits(int x, int p){
        if(x < 10)
            return (int)Math.pow(x, p);
        else{
            int t = (int)Math.pow(x % 10, p);
            return t + sumOfDigits(x / 10, --p);
        }
    }
    public void check(){
        if(num == sumOfDigits(num, size))
            System.out.println(num + " is a Disariu
        else
            System.out.println(num + " is not a Dis
    }
    public static void main(String args[])
    throws IOException{
        InputStreamReader in = new InputStreamReade
        BufferedReader br = new BufferedReader(in);
        System.out.println("Name:Vyshnavisrija");
        System.out.println ("Sap id:51834503");
        System.out.print("Number: ");
        int x = Integer.parseInt(br.readLine());
        Main obj = new Main(x);
        obj.countDigit();
        obj.check();
    }
}
```

```
Name:Vyshnavisrija
Sap id:51834503
Number: 50
50 is not a Disarium Number.

Process finished.
```

```java
import java.util.Arrays;

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

        System.out.println("Name:Vyshnavisrija ");
        System.out.println ("Sap id:51834503");
        System.out.println("Input Array Before Sort

        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.leng
        {
            inputArray[n] = 1;
        }

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

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

```
yshnavisrija
:51834503
Array Before Sorting : [1, 0, 1, 1, 0, 1, 0, 0]
Array After Sorting : [0, 0, 0, 0, 1, 1, 1, 1]

s finished.
```

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

  while (a % 10 > 0)
  {

    int remainder = a % 10;

    if (remainder == numbertobereplaced)
      result = result + replacingnumber * multiply;

    else
      result = result + remainder * multiply;

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

public static void main(String[] args)
{
  int a = 645, numbertobereplaced = 6, replacingnum
  System.out.println("Name:Vyshnavisrija");
  System.out.println ("Sap id:51834503");
  System.out.println(replaceDigit(a, numbertoberep
}
}
```

```
Name:Vyshnavisrija
Sap id:51834503
545

Process finished.
```

```java
public class Main
{
  public static int binarySearch(int[] M, int left,
  {
    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 = { 2, 3, 6, 8, 4, 10 };
    int key = 3;

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

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

    System.out.println("Name:Vyshnavisrija");
    System.out.println("Sap id:51834503");
    if (index != -1) {
      System.out.println("Element found at index "
    } else {
      System.out.println("Element not found in the
    }
  }
}
```

```
Name:Vyshnavisrija
Sap id:51834503
Element found at index 1

Process finished.
```