

```

1 import java.io.*;
2 public class Main
3 {
4     public static void main(String[] args) throws IOException
5     {
6         BufferedReader br=new BufferedReader (new In
7         System.out.println("Name: T.pravallika sapid
8         System.out.print("Enter a number : ");
9         int n = Integer.parseInt(br.readLine());
10        int copy = n, a = 0, sum = 0;
11        String b = Integer.toString(n);
12        int len = b.length();
13
14        while(copy>0)
15        {
16            a = copy % 10;
17            sum = sum + (int)Math.pow(a,len);
18            len--;
19            copy = copy / 10;
20        }
21
22        if(sum == n)
23            System.out.println(n+" is a Disarium Numl
24        else
25            System.out.println(n+" is not a Disarium
26    }
27 }

```

✕ Terminal



```

Name: T.pravallika sapid: 51834742
Enter a number : 5
5 is a Disarium Number.

```

Process finished.



```
1 public class Main
2 {
3     public static int binarySearch(int[] M, int left, int right, int n)
4     {
5         if (left > right) {
6             return -1;
7         }
8
9
10        int mid = (left + right) / 2;
11
12        if (n == M[mid]) {
13            return mid;
14        }
15
16        else if (n < M[mid]) {
17            return binarySearch(M, left, mid - 1, n);
18        }
19
20        else {
21            return binarySearch(M, mid + 1, right, n);
22        }
23    }
24
25    public static void main(String[] args)
26    {
27        int[] M = { 2, 5, 6, 8, 9, 10 };
28        int key = 3;
29
30        int left = 0;
31        int right = M.length - 1;
32
33        int index = binarySearch(M, left, right, key);
34
35        System.out.println("Name:T.pravallika sapid:51834742");
36        if (index != -1) {
37            System.out.println("Element found at index " + index);
38        } else {
39            System.out.println("Element not found in the array");
40        }
41    }
42 }
```





```
Name:T.pravallika sapid:51834742  
Element not found in the array  
  
Process finished.
```



```
1 import java.util.Arrays;
2
3 public class Main
4 {
5     private static void sortBinaryArray(int[] inputArray)
6     {
7         int zeroCount = 0;
8
9         System.out.println("Name:T.pravallika sapid:518347");
10        System.out.println("Input Array Before Sorting : ");
11
12
13        for (int n = 0; n < inputArray.length; n++)
14        {
15            if (inputArray[n] == 0)
16            {
17                zeroCount++;
18            }
19        }
20
21
22        for (int n = 0; n < zeroCount; n++)
23        {
24            inputArray[n] = 0;
25        }
26
27
28        for (int n = zeroCount; n < inputArray.length; n++)
29        {
30            inputArray[n] = 1;
31        }
32
33        System.out.println("Input Array After Sorting : ");
34    }
35
36    public static void main(String[] args)
37    {
38        sortBinaryArray(new int[] {1, 0, 1, 1, 0, 1, 0, 0});
39    }
40}
```



Name: T.pravallika sapid: 51834742

Input Array Before Sorting : [1, 0, 1, 1, 0, 1, 0, 1, 0, 1]

Input Array After Sorting : [0, 0, 0, 0, 1, 1, 1, 1, 1, 1]

Process finished.