

```
1 public class Main
2 {
3     static int replaceDigit(int a, int numbertobereplaced,
4                             int replacingnumber)
5     {
6         int result = 0, multiply = 1;
7
8         while (a % 10 > 0)
9         {
10
11             int remainder = a % 10;
12
13             if (remainder == numbertobereplaced)
14                 result = result + replacingnumber * multiply;
15
16             else
17                 result = result + remainder * multiply;
18
19             multiply *= 10;
20             a = a / 10;
21         }
22         return result;
23     }
24
25     public static void main(String[] args)
26     {
27         int a = 645, numbertobereplaced = 6, replacingnumber = 5;
28         System.out.println("Author:Y.Naveen sai\nSAP ID:51834545");
29         System.out.println(replaceDigit(a, numbertobereplaced, re
30     }
31 }
```

X Terminal



Author:Y.Naveen sai
SAP ID:51834545
545

Process finished.

```
1 public class Main
2 {
3     public static int binarySearch(int[] M, int left, int right)
4     {
5         if (left > right) {
6             return -1;
7         }
8
9         int mid = (left + right) / 2;
10
11        if (n == M[mid]) {
12            return mid;
13        }
14
15        else if (n < M[mid]) {
16            return binarySearch(M, left, mid - 1, n);
17        }
18
19        else {
20            return binarySearch(M, mid + 1, right, n);
21        }
22    }
23
24
25    public static void main(String[] args)
26    {
27        int[] M = { 2, 5, 6, 8, 9, 10 };
28        int key = 2;
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("Author:Y.Naveen sai\nSAP ID: 5183454");
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 }
```

X Terminal



```
Author:Y.Naveen sai
SAP ID: 51834545
Element found at index 0
```

```
Process finished.
```

X Terminal



Author:Y.Naveen sai
SAP ID: 51834545
Number: 1
1 is a Disarium Number.

Process finished.