



## Electronic Display - Maximum Value

In a four-digit electronic display, each digit is displayed using **seven** segments. The program must accept an integer **N** representing the number of segments to display an integer **X**. The program must print the maximum possible four-digit integer X that can be displayed using N segments as the output.

The number of segments required to display each digit is given below.

0 - 6  
1 - 2  
2 - 5  
3 - 5  
4 - 4  
5 - 5  
6 - 6  
7 - 3  
8 - 7  
9 - 6

### Boundary Condition(s):

$8 \leq N \leq 28$

### Input Format:

The first line contains N.

### Output Format:

The first line contains X.

### Example Input/Output 1:

Input:

13

Output:

9711

Explanation:

Here  $N = 13$ .

The maximum possible four-digit integer that can be displayed using **13** segments is **9711** ( $9+7+1+1 = 13$ ).

### Example Input/Output 2:

Input:

10

Output:

7711

### Example Input/Output 3:

Input:

18

Output:

9977

**Max Execution Time Limit: 50 millisecs**

Ambiance

Java ( 12.0)



```

1 import java.util.*;
2 public class Hello {
3
4     static Hashtable<Integer,Integer> ht = new Hashtable<>();
5     public static void main(String[] args) {
6
7         ht.put(0,6);
8         ht.put(1,2);
9         ht.put(2,5);
10        ht.put(3,5);
11        ht.put(4,4);
12        ht.put(5,5);
13        ht.put(6,6);
14        ht.put(7,3);
15        ht.put(8,7);
16        ht.put(9,6);
17
18        int arr[] = new int[4];
19        Arrays.fill(arr,-1);
20        Scanner sc = new Scanner(System.in);
21
22        int seg = sc.nextInt();
23
24
25        solveRec(seg,arr,0,9);
26
27        for(int i:arr) if(i!=-1) System.out.print(i+"");
28
29    }
30
31    public static void solveRec(int remainingSeg,int[] arr,int filled,int processing){
32
33        //System.out.println(Arrays.toString(arr)+"-"+remainingSeg);
34
35        if(filled==4){
36            if(remainingSeg>0){
37                int preProcessed=arr[filled-1];
38                int resetSeg = ht.get(arr[filled-1]);
39                arr[filled-1]=-1;
40                solveRec(remainingSeg+resetSeg,arr,filled-1,preProcessed-1);
41                return;
42            }else{
43                return;
44            }
45        }
46
47        if(processing==1){
48            int preProcessed= arr[filled-1];
49            int resetSeg = ht.get(arr[filled-1]);
50            arr[filled-1]=-1;
51            solveRec(remainingSeg+resetSeg,arr,filled-1,preProcessed-1);
52            return;
53        }
54
55        //System.out.println(processing+"----");
56        int neededSeg = ht.get(processing);
57
58        if(remainingSeg<neededSeg){
59            solveRec(remainingSeg,arr,filled,processing-1);
60        }else{
61            arr[filled] = processing;
62            solveRec(remainingSeg-neededSeg ,arr,filled+1,9);
63        }
64    }
65 }

```

1912067@nec

Code did not pass the execution

✕

You have used 2 reveals out of 3 in the past 7 Days.

Input:

27

Expected Output:

9888

Your Program Output:

9999

7 Private (Hidden) Test Cases Failed.

11 Passed

7 Failed

MEM: 0.09765625 MB CPU: 0.01

Save

Run