



Practice > Mathematics > Fundamentals > Special Multiple

Special Multiple ☆

Points: 477.99 Rank: 2874

Problem

Submissions

Leaderboard

Discussions

Editorial

You are given an integer N . Can you find the least positive integer X made up of only 9's and 0's, such that, X is a multiple of N ?

Update

X is made up of one or more occurrences of 9 and zero or more occurrences of 0.

Input Format

The first line contains an integer T which denotes the number of test cases. T lines follow.

Each line contains the integer N for which the solution has to be found.

Output Format

Print the answer X to STDOUT corresponding to each test case. The output should not contain any leading zeroes.

Constraints $1 \leq T \leq 10^4$ $1 \leq N \leq 500$ **Sample Input**

```
3
5
7
1
```

Sample Output

```
90
9009
9
```

Explanation

90 is the smallest number made up of 9's and 0's divisible by 5. Similarly, you can derive for other cases.

Timelimits Timelimits for this challenge is given [here](#)

Author

shashank21j

Difficulty

Medium

Max Score

30

Submitted By

3299

NEED HELP?

[View discussions](#)[View editorial](#)[View top submissions](#)

RATE THIS CHALLENGE



MORE DETAILS

[Download problem statement](#)[Download sample test cases](#)[Suggest Edits](#)

Current Buffer (saved locally, editable)



Java 7



```
1 import java.io.*;
2 import java.math.*;
3 import java.text.*;
4 import java.util.*;
5 import java.util.regex.*;
6
7 public class Solution {
8
9     // Complete the solve function below.
10    static String solve(int n) {
11
```

```
12
13     }
14
15     private static final Scanner scanner = new Scanner(System.in);
16
17     public static void main(String[] args) throws IOException {
18         BufferedWriter bufferedWriter = new BufferedWriter(new
19         FileWriter(System.getenv("OUTPUT_PATH")));
20
21         int t = scanner.nextInt();
22         scanner.skip("(\\r\\n| [\\n\\r\\u2028\\u2029\\u0085])?");
23
24         for (int tItr = 0; tItr < t; tItr++) {
25             int n = scanner.nextInt();
26             scanner.skip("(\\r\\n| [\\n\\r\\u2028\\u2029\\u0085])?");
27
28             String result = solve(n);
29
30             bufferedWriter.write(result);
31             bufferedWriter.newLine();
32         }
33
34         bufferedWriter.close();
35
36         scanner.close();
37     }
38 }
```

Line: 1 Col: 1

[Upload Code as File](#) ☐ Test against custom input

Run Code

Submit Code