HackerRank

CHALLENGES   SUBMISSIONS   LEADERBOARD

BIGOHOFTSS

The contest is in progress. It ends about 5 hours from now.

Contests > IEEEXtreme Programming Competition 7.0 >

Problem_AF

Problem   ≔ Submissions   🏆 Leaderboard   💬 Discussions

Joe and his entire College, total 1337 of them, went for a picnic. They were bored and they planned a game. Everybody stand in a circle, each of them identifiers starting from 1 to 1337 consecutively in a circle, clockwise. The rule is that "a numbering CONTAINS or DIVISIBLE by 7, will reverse the direction".

Let's elaborate the game a bit more. The identifiers of the students who yell-out successive numbers, are: 1,2,3,4,5,6,7 (student 7 has just yell "7" and reversed the direction),6,5,4,3,2,1,1337 (student 1337 has just yell "14" and reversed the direction),1,2,3 (student 3 has just yell "17" and reversed the direction),2,1,1337,1336, and so on. Joe has his favorite number, and he wants to calculate where in the circle he should stand to yell that number out loud.

Now that the game is set, Joe wants to stand a place from where he could yell his favourite number. Would you please help Joe?

Input

First input, t, where $1 \le t \le 1000$, the number of test cases. Followed by test cases in separate line, and contains a positive integer smaller than 10100, representing Joe's favorite number.

Output

Expected output for each test case, is the idenitifier which Joe should choose in the circle to yell his favorite integer loud.

Sample Input 1:

```
3
10
100
1000
```

Sample Output 1:

```
4
2
1311
```

Problem Author: IEEE

```cpp
1  #include <cmath>
2  #include <cstdio>
3  #include <vector>
4  #include <iostream>
5  #include <algorithm>
6  using namespace std;
7
8
9  int main() {
10     /* Enter your code here. Read input from STDIN. Print output to STDOUT */
11     return 0;
12 }
13
```

Line: 1 Col: 1 Count: 227

☐ Use a custom test case

⬆ Upload Code as File

Compile & Test   Submit Code