2148 - I2P(II) 2020_Chen_mid1_practice Scoreboard

Time

2020/10/29 18:30:00	16:52:07	2020/11/05 18:30:00

Clarification

#	Problem	Asker	Description	Reply	Replier	Reply Time	For all team

Overview Problem

12435 - Go Down Chicken

Status | Limits Submit

Description

"Go Down Chicken is a vicious monster, it will hit you until you have cerebral concussion(腦震盪)." -from an anonymous bestiary.

To avoid from being attacked by Go Down Chicken, you need to solve the following problem.

This question has multiple input in each testcase. The input end with **EOF**.

Each input contain **n** numbers a_i**(1 <= i <= n)** and **q** queries x_j**(1 <= j <= q)**.

Each number a_i represents a game.

The game is that you need to fill a 3 * a_i tiles with the shape(The left one) described in the picture below.

The shape **can't overlap and no empty space allow.** For each a_i you need to calculate how many ways you can fill the tiles.

The number of ways may be very large, therefore you need to **mod the answer with 1000000007**.

For example:

The picture above present a 3*6 tiles, you will have 8 ways to fill the tiles with the shape.

Once you finish those **n** games, you need to answer **q** queries.

Each query will give you one integer x_j means the ways to fill the tiles.

You need to answer x_j is in which round of the games?

If there're multiple answers, answer the earliest round.

If you can't find the answer, print "Go Down Chicken 404"

Sample input explain:

You have **n = 5, q = 3**

Then you have 5 integer: **6, 9, 13, 4, 3**

If the tiles is 3*6: you have 8 ways to fill it.

If the tiles is 3*9: you have 0 ways to fill it.

If the tiles is 3*13: you have 0 ways to fill it.

If the tiles is 3*4: you have 4 ways to fill it.

If the tiles is 3*3: you have 0 ways to fill it.

Then you have 3 queries: **0, 4, 1024**

There are multiple rounds turn out have 0 ways, but you need to answer the earliest round. The earliest round is second round.

Therefore the answer is 2.

The round that turns out have 4 ways is the forth round.

Therefore the answer is 4.

The round that turns out have 1024 ways can't be found.

Therefore the answer is "Go Down Chicken 404".

Psychologist: Don't be afraid,
Go Down Chicken
do not exist, it won't hurt you.

Go Down Chicken:

Input

The input is end with **EOF**

Each input contains several lines.

First line contains two integer **n(1 <= n <= 1000000), q(1 <= q <= 1000000)**.

Second line contain **n** integer a_i**(1 <= a_i <= 1000000)**.

Each a_i is followed by a symbol "(/^A^)/ ~I__I" and separated by a blank from the next integer.

The following **q** lines each line contains one integer x_j .

Output

For each query print that x_j is the result of which round of the games(**start from 1**).

If there're multiple answers, answer the earliest round.

If you can't find the answer, print "Go Down Chicken 404"

Sample Input Download

```
5 3
6(/^A^)/ ~I__I 9(/^A^)/ ~I__I 13(/^A^)/ ~I__I 4(/^A^)/ ~I__I 3(/^A^)/ ~I__I
0
4
1024
6 4
8(/^A^)/ ~I__I 2(/^A^)/ ~I__I 3(/^A^)/ ~I__I 8(/^A^)/ ~I__I 11(/^A^)/ ~I__I 12(/^A^)/ ~I__I
16
0
2
512
```

Sample Output Download

```
2
4
Go Down Chicken 404
1
3
2
Go Down Chicken 404
```

Discuss