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## Roy and Little Mario

👁 Submissions   Attempted by: 375 | Solved by: 203 | Partially Solved by: 39 | ★★★★★

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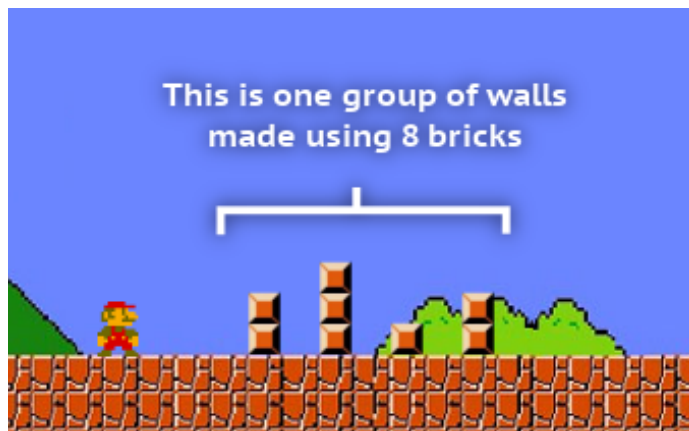
Sokrati Hiring Challenge

Roy has played a lot of Mario that he got bored of playing it again and again. So now he wants to design a stage of Mario game.

Right now he is simply designing a group of walls using bricks that little Mario has to cross over. Little Mario cannot jump more than 3 bricks' height, so Roy cannot create a wall of height more than 3.

Roy has  $N$  number of bricks. Roy wants to make a group of walls such that height of no single wall exceeds 3.

For example if  $N = 8$ , one of the group of walls can be as follows:



Now Roy wonders how many different groups of walls can he generate for a given number of bricks. (See **Sample Test Case Explanation** for clarification)

### Input:

First line contains integer  $T$ , number of Test Cases. Next  $T$  lines each will contain integer  $N$ , number of bricks Roy has.

### Output:

Print an integer in new line for each test case, number of different groups of walls.

Since answer can be very large, print it modulo 1000000007

### Constraints:

 $1 \leq T \leq 10$  $1 \leq N \leq 100000$ 

**Sample Test Case Explanation:** For  $N = 3$



1  
LIVE EVENTS

Sample Input ([Plaintext Link](#))

1  
3

Sample Output ([Plaintext Link](#))

4

Time Limit: 2 sec(s) for each input file.

Memory Limit: 256 MB

Source Limit: 1024 KB

Marking Scheme: Marks are awarded if any testcase passes.

Allowed languages: C, CPP, CLOJURE, CSHARP, GO, HASKELL, JAVA, JAVASCRIPT, JAVASCRIPT\_NODE, LISP, OBJECTIVEC, PASCAL, PERL, PHP, PYTHON, RUBY, R, RUST, SCALA

Problem Author: [Ravi Ojha](#)

C

Upload file:  No file chosenSave 

```
1  #include <stdio.h>
2
3  int main()
4  {
5      printf("Hello World!\n");
6      return 0;
7  }
8
```

6

Submit

Compile &amp; Test

Provide custom input

 Play Code (C)

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Rajan Ka...		1.0058	C++
Rajan Ka...		1.0062	C++
rit20130...		1.0059	C
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rit20130...		1.0058	C

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