

← Practice Programming Problems / Selection of Cities Selection of Cities Submissions Attempted by: 537 | Solved by: 182 | Partially Solved by: 95 | ★★★★★ Math **Ø** Edit Combinatorics Problem Editorial My Submissions Analytics Cloud Testing Chall... James has decided to take a break from his work. He makes a plan to visifindia for a few days with his family. He knows a lot about India, and also about the various cities he could visit. He

decides to write down all the cities on a paper. Let the number of cities be n. Now, he shows the list to his wife and asks her, the city/cities she wants to visit. He tells her that she can select any city/cities and any number of cities. The wife says, she needs a day to decide.

After this, James calls his son and tells him all about the trip, and the list of cities. He gives him a task and asks him, the number of ways the city/cities can be chosen from the list, if the total number of cities written on the list is n. The cities are numbered from 1 to n. At least 1 city has to be selected.

He now asks your help to find the answer for the question that was asked to him. The problem consists of a number of test cases.

INPUT:

The first line of input contains the number of test cases t. Then t lines follow, each contains a number n, the number of cities.

OUTPUT:

Output contains t lines; each line contains the answer for that test case. As the answer can be large, print the answer modulo 10^9+7

CONSTRAINTS

1<=t<=100000

1<=n<=10¹²

Author/Problem Setter: Prateek Kumar

Tester:

Sample Input (Plaintext Link)

2

2

1

Sample Output (Plaintext Link)

1

Explanation

For test case 1: The only ways to select the cities is 1 2 1 2 Therefore the answer is 3.

For test case 2: The only way to select a city is 1 Therefore the answer is 1.

Time Limit: 1 sec(s) for each input file.

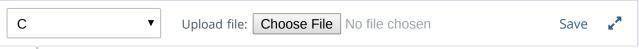
Memory Limit: 256 MB Source Limit: 1024 KB

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: PRATEEK KUMAR Problem Tester: Chandan Singh



```
#include <stdio.h>

int main()

frintf("Hello World!\n");
return 0;

}
```

1

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Provide custom input

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more...

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User	Result	Time	Lang
Jayanth		11.1198	Python
Jayanth		1.3397	C++
HARSH VA		0.5397	С
HARSH VA		0.5028	С
HARSH VA		0.503	С
Deepak S		1.5666	C++
Deepak S		1.2508	Python
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TRENDING NOTES

Number Theory - III written by Boris Sokolov

Exact String Matching Algorithms

written by Alei Reyes

Binary Indexed Tree or Fenwick Tree

written by Chandan Mittal

Small tricks in for loop

written by Rangeesh

Strings And String Functions

written by Vinay Singh

more ...

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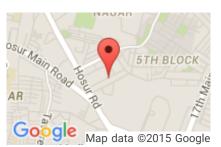
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