Toy Blocks

locked

by DOSHI

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Michael has a toy block set. The toy set consists of N identical blocks.
Michael wants to make ***buildings*** from these blocks.
A ***building*** is a structure formed by a pile of at least two blocks.

Your task is to find total ways, such that all blocks are utilized in making ***buildings***.

Example

N : 5 Blocks
Ways to make a ***building*** : [5], [2, 3]
Total ways : 2

N : 6 Blocks
Ways to make a ***building*** : [6], [4, 2], [3, 3], [2,2,2]
Total ways : 4

Input Format

Single line containing, integer N.

Constraints

$2 \leq N \leq 500$

Output Format

Submissions: 83

Max Score: 40

Difficulty: Easy

Rate This Challenge:

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Output total ways, such that all blocks are used in making ***buildings***.
As this number can be very large, print **answer % (10^9+7)**

Sample Input

4

Sample Output

2

Explanation

[4] and [2,2] are the only possible ways of making ***buildings***. Therefore, the output is 2 ways.

Current Buffer (saved locally, editable)

Java 7

```
1  import java.io.*;
2  import java.util.*;
3  import java.text.*;
4  import java.math.*;
5  import java.util.regex.*;
6
7  public class Solution {
8
9      public static void main(String[] args) {
10         /* Enter your code here. Read input from STDIN. Print output to STDOUT. Your class should be named Solution. */
11     }
12 }
```

Line: 1 Col: 1

Upload Code as File Test against custom input Run Code Submit Code