

Bad Cook

Time Limit:

1 sec

Setter: Mir Imtiaz Mostafiz Naved

Memory Limit: **512 MB**

Mr. Meme has recently moved to a foreign country named "Gloryland" for study purpose. There, he has to cook for himself. But he is not even an amateur. He always messes up his recipe. Say, there are 3 steps in a recipe: Boil, Put Spice, and Fry. He will never do it in order: he may put spice first, then fry, then boil things.

But there is an interesting pattern in his messing up of recipe. Let's say the recipe includes \mathbf{n} steps. He always messes up in such a way that odd-numbered steps never come consecutively in his cooking. So, if the recipe contains $\mathbf{5}$ steps: 1, 2, 3, 4, 5 - he will never do things like 2, 1, 3, 5, 4 or 2, 1, 4, 3, 5 - where you can find consecutive odd-numbered steps.

And remember, he always messes up!! Doing 1, 2, 3, 4, 5 is not valid in his case although there are no consecutive odd-numbered steps, because it is the right recipe!

Input:

The input file will contain T+1 lines (1 <= T <= 2000). First line will contain T, the number of test cases. Each of next T line will contain a single integer T (2<=T <= 2000), the number of steps of a recipe.

Output:

For each **N**, print the number of ways Mr. Meme can mess up the recipe. Print the result modulo **100000007**.

Sample I/O:

Sample Input	Sample Output
2	11
4	1
3	

Note: For the first sample, the valid combinations for N = 4 are: 1243, 1423, 1432, 2143, 2341, 3214, 3241, 3412, 3421, 4123, 4321. For the second sample, the valid combinations for N = 3 is 321 only.