

## 7559 Similar Strings

*Chota Pendrive* likes to play with strings a lot. For a given string  $s$ , he obtains its compressed string in the following way:

- In a single operation, he takes any two consecutive equal characters of  $s$ , and removes one of them.
- He keeps doing this operation as long as possible.

The resulting string will be the compressed string of  $s$ . e.g. if the initial string is “abaaabb”, its compressed form is “abab”.

Two strings  $s$  and  $t$  are said to be similar if their compressed strings are equal.

You have to find the number of **ordered pairs** of similar strings  $(s, t)$  having length at least one and at most  $N$ . Both  $s, t$  contain lower case English alphabet. As the answer could be large, print it modulo **1000000007** ( $10^9 + 7$ ).

### Input

The first line of the input contains an integer  $T$  denoting the number of test cases. The description of  $T$  test cases follows.

Each test case contains a single integer  $N$ .

### Output

For each test case, print a single integer corresponding to the answer of the problem, on a line by itself.

### Constraints:

- $1 \leq T, N \leq 5000$

### Explanation:

- **In the first example**,  $s$  and  $t$  will be equal and will contain the same character. There are 26 possibilities for that from ‘a’ to ‘z’.
- **In the second example**, we can count the possible  $(s, t)$  similar pairs in the following way.
  - Case 1:  $s$  is same as  $t$ , there are 26 (each string contains 1 character) + 26 \* 26 (each string contains 2 characters) possibilities for that.
  - Case 2:  $s$  is of type aa and  $t$  is of type a, where a is some character. There are 26 possible cases for this.
  - Case 3:  $s$  is of type a and  $t$  is of type aa, where a is some character. There are 26 possible cases for this.

So, in total, there are  $26 + 26 * 26 + 26 + 26 = 754$  ordered  $(s, t)$  pairs.

### Sample Input

```
2
1
2
```

**Sample Output**

26

754