

Large subsequence Problem

Given a string **S** which contains only digit-characters. How many subsequences can be obtained from **S** such that every digit is strictly greater than all previous digits in that subsequence. As for example if **S**=7598 then there are 8 subsequences which follow the above constraint. These are 7,5,9,8,79,78,59,58. Notice that 7598 is not a required subsequence because $7 > 5$ and $9 > 8$.

Note: A subsequence is a sequence that can be derived from another sequence by deleting some elements without changing the order of the remaining elements.

Input

Input starts with an integer **T** (≤ 1000), denoting the number of test cases. Each case contains a string **S**. The length of **S** does not exceed **10000**. **S** does not contain any leading zeros.

Output

For each case, print the a string(without quotes) "**Case i:** " follwed by number of subsequences where "i" is test case number. Answer may be very large, so output it **modulo 10^9+7** .

Example

Input:

```
2
4
7598
```

Output:

```
Case 1: 1
Case 2: 8
```

For small constraints: www.spoj.com/problems/SUBP/