# Problem A. Sabek and Lahek

Input file: `standard input`
Output file: `standard output`

Sabek and Lahek are twin brothers, they love playing with race cars.

Each one has a car of length $N$. Each car can be colored with $C$ characters if $N = 2, C = 26$, In that case, each one of them have cars like this, A, B, ..., Z, AA, AB, ... AZ, BA, ... ZZ so there are $26+26^2+...+26^N$ choices for **each** car's color

Find how many choices for coloring the cars considering the property that at least one character is present in each car's color? Since the answer may be very large, output it modulo 1000000007 $(10^9 + 7)$.

## Input

The first line will contain $(0 < T \leq 50)$ the number of test cases.

Each test case contains two integers $N$, $C$ the length of the car, and the number of different characters.

## Output

For each test case, print the answer modulo 1000000007 $(10^9 + 7)$.

## Scoring

Sub task #1 (20 points): $(1 \leq N \leq 100)$, $(C = 2)$.

Sub task #2 (30 points): $(1 \leq N \leq 3)$, $(2 \leq C \leq 26)$.

Sub task #3 (50 points): $(1 \leq N \leq 500)$, $(2 \leq C \leq 26)$.

## Examples

| standard input | standard output |
|---|---|
| 2<br>1 2<br>2 2 | 2<br>28 |
| 1<br>1 26 | 26 |