Math Challenge

Time limit: *500 ms*
Memory limit: *64 MB*

Paola is a strict Math teacher.

She challenged her students to calculate $a^{\binom{b}{c}}$ where $\binom{b}{c} = \frac{b!}{c! * (b-c)!}$.

Are you up to the challenge? Can you calculate this number?

Standard input

The input begins with an integer t $(1 \leq t \leq 10)$, giving the number of test cases in the input.

Each of the following t lines represent a different test case and consist of three integers a, b, c ($1 \leq a, b, c \leq 10^6$ and $b \geq c$).

Standard output

Output t lines, for each case print the result modulo $10^9 + 7$.

Constraints and notes

- $1 \leq t \leq 10$
- $1 \leq a, b, c \leq 10^6$
- $b \geq c$

Input	Output
3 1 5 5 2 10 2 3 9 4	1 371842544 665507626
3 2 5 3 3 8 4 1 1000000 500000	1024 662963356 1