



HOME TOP CONTESTS GYM PROBLEMSET GROUPS RATING API CALENDAR HELP 10 YEARS! 🏗

PROBLEMS SUBMIT STATUS STANDINGS CUSTOM TEST

D. Count the Arrays

time limit per test: 2 seconds memory limit per test: 512 megabytes input: standard input output: standard output

Your task is to calculate the number of arrays such that:

- each array contains n elements;
- each element is an integer from 1 to m;
- for each array, there is **exactly** one pair of equal elements;
- for each array a, there exists an index i such that the array is **strictly ascending** before the i-th element and **strictly descending** after it (formally, it means that $a_j < a_{j+1}$, if j < i, and $a_j > a_{j+1}$, if $j \geq i$).

Input

The first line contains two integers n and m ($2 \le n \le m \le 2 \cdot 10^5$).

Output

Print one integer — the number of arrays that meet all of the aforementioned conditions, taken modulo 998244353.

Examples

input	Сору
3 4	
output	Сору
6	
input	Сору
3 5	
output	Сору
10	
input	Сору
42 1337	
output	Сору
806066790	
input	Сору
100000 200000	
output	Сору

Note

707899035

The arrays in the first example are:

- [1, 2, 1];
- [1, 3, 1];
- [1, 4, 1];
- [2, 3, 2];
- [2, 4, 2];
- [3,4,3].

Educational Codeforces Round 83 (Rated for Div. 2)

Finished

Practice



→ Virtual participation

Virtual contest is a way to take part in past contest, as close as possible to participation on time. It is supported only ICPC mode for virtual contests. If you've seen these problems, a virtual contest is not for you solve these problems in the archive. If you just want to solve some problem from a contest, a virtual contest is not for you solve this problem in the archive. Never use someone else's code, read the tutorials or communicate with other person during a virtual contest.

Start virtual contest

→ Clone Contest to Mashup

You can clone this contest to a mashup.

Clone Contest

→ Submit?

Language:	GNU G++17 7.3.0 ▼	
Choose file:	Choisir un fichier Aucun fchoisi	
	Submit	

→ Problem tags

combinatorics	math	*1700
		No tag edit access

→ Contest materials

AnnouncementTutorial



Codeforces (c) Copyright 2010-2020 Mike Mirzayanov The only programming contests Web 2.0 platform Server time: Apr/01/2020 14:17:24^{UTC+1} (i2).

Desktop version, switch to mobile version.

Privacy Policy

Supported by



