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 ($2 \leq n \leq m \leq 2 \cdot 10^5$).

Output

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

Examples

input	Copy
3 4	
output	**Copy**
6	

input	Copy
3 5	
output	**Copy**
10	

input	Copy
42 1337	
output	**Copy**
806066790	

input	Copy
100000 200000	
output	**Copy**
707899035	

Note

The arrays in the first example are:

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