Problem E. Competition Graph

Input file:	`standard input`
Output file:	`standard output`
Time limit:	3 seconds
Memory limit:	256 megabytes

Little A has obtained a competition graph.

Given n, k, find how many labeled competition graphs with n vertices contain at least one k-cycle. The answer should be taken modulo 998244353.

Please recall the following concepts with Little A:

Competition Graph: A directed graph with n vertices and $\frac{n(n-1)}{2}$ edges, where there is exactly one directed edge between any two vertices with different labels.

k-cycle: A sequence of k distinct vertices $v_1, v_2, \cdots, v_k$ such that there are directed edges in the graph:

$$(v_1, v_2), (v_2, v_3), \cdots, (v_{k-1}, v_k), (v_k, v_1)$$

Input

The first line contains two positive integers n, k ($2 \leq n, k \leq 10^5$).

Output

Output a single integer representing the answer, taken modulo 998244353.

Examples

standard input	standard output
3 2	0
3 3	2