Ice Cream Shop

Max. score: 100

This problem is no longer available for practice. Apology for any inconvenience!

Recently, Teo has opened a new ice cream shop in Shopee. There are $5 * 10^5$ ice cream recipes (numbered from 1 *to* $5 * 10^5$). For the i-*th* recipe, there are i types of ice cream balls with different flavors. To make an ice cream cup from recipe i, customers have to choose exactly two ice cream balls from recipe i (may choose two ice cream balls of the same type). Two ice cream cups are considered different if at least one condition is satisfied:

- Made from different recipes.
- If they are made from the same recipe, two ice cream balls must be different in order.

The price for an ice cream cup of i-*th* recipe is i SGD.

Teo has m friends and will give them a voucher with n SGD. However, he has 2 conditions that need to be satisfied:

- Each friend must order exactly one ice cream cup.
- The total cost of all orders must be exactly n SGD.

He wonders how many ways m friends can order from his shop with n SGD voucher. As the answer may be quite large, please print it with modulo 998244353.

Input:

- *2* integer numbers n and m
- $1 \leq n, m \leq 5 * 10^5$

Output:

- The answer modulo 998244353

SAMPLE INPUT
3 2

SAMPLE OUTPUT
8

Explanation

Because we have 3 SGD and 2 people, so we can only buy ice cream cups from the first two recipes.

Let's name ice cream balls for the first recipe are A, the ice cream balls for the second recipe are B and C.

An ice cream cup is a combination of 2 ice cream balls of the same type. (AA, BB, BC, CC, CB)

We have 8 ways in total (ice cream cups are chosen in order)

(AA, BB); (AA, BC); (AA, CB); (AA, CC); (BB, AA); (BC, AA); (CB, AA); (CC, AA)

Time Limit:	1.0 sec(s) for each input file.
Memory Limit:	256 MB
Source Limit:	1024 KB
Marking Scheme:	Score is assigned when all the testcases pass.
Allowed Languages:	Bash, C, C++, C++14, C++17, Clojure, C#, D, Erlang, F#, Go, Groovy, Haskell, Java, Java 8, Java 14, JavaScript(Rhino), JavaScript(Node.js), Julia, Kotlin, Lisp, Lisp (SBCL), Lua, Objective-C, OCaml, Octave, Pascal, Perl, PHP, Python, Python 3, Python 3.8, Racket, Ruby, Rust, Scala, Swift-4.1, Swift, TypeScript, Visual Basic