

Problem C. Multiple?

Input file: *standard input*
Output file: *standard output*
Time limit: 4 seconds
Memory limit: 256 mebibytes

Given an integer n , the sequence is called *good* if its elements are from $[1, n]$ and all its non-empty subsequences (not necessarily continuous) have sums not divisible by n .

Calculate the number of good sequences of length $n - k$ modulo 998 244 353.

Input

The only line of input contains two integers n and k ($1 \leq k \leq n/4 < n < 998\,244\,353$).

Output

Print one number — the answer to the problem.

Examples

standard input	standard output
4 1	2
9 2	48
22222222 22222	851798824