L. EULER

Given 2 positive integers A and B. Calculate the sum of the Euler's totient function of the first B multiples of A. As the answer can be large, output the remainder of it when divided by 998244353.

The Euler's totient function of a positive integer n is the number of integers k such that $1 \leq k \leq n$ and gcd(n, k) = 1. Here, gcd(a, b) is the greatest common divisor of a and b.

INPUT

The first and only line contains 2 integers A and B. ($1 \leq A, B \leq 5 \times 10^6$).

OUTPUT

Print one line containing the answer - the sum of the Euler's totient function for the first B multiples of A, modulo 998244353.

Sample Input	Sample Output
2 4	9
1 3	4

For the first test, we can see that:

$\varphi(2) + \varphi(4) + \varphi(6) + \varphi(8) = 1 + 2 + 2 + 4 = 9$

For the second test, we have:

$\varphi(1) + \varphi(2) + \varphi(3) = 1 + 1 + 2 = 4$