

Problem Y. Simple Math

Time limit 2000 ms
Mem limit 1048576 kB

Problem Statement

Given are three positive integers A , B , and C . Compute the following value modulo 998244353:

$$\sum_{a=1}^A \sum_{b=1}^B \sum_{c=1}^C abc$$

Constraints

- $1 \leq A, B, C \leq 10^9$

Input

Input is given from standard input in the following format:

A B C

Output

Print the value modulo 998244353.

Sample 1

Input	Output
1 2 3	18

We have: $(1 \times 1 \times 1) + (1 \times 1 \times 2) + (1 \times 1 \times 3) + (1 \times 2 \times 1) + (1 \times 2 \times 2) + (1 \times 2 \times 3) = 1 + 2 + 3 + 2 + 4 + 6 = 18$.

Sample 2

Input	Output
1000000000 987654321 123456789	951633476

Be sure to compute the value modulo 998244353.