



时间限制: C/C++ 1秒, 其他语言2秒
空间限制: C/C++ 262144K, 其他语言524288K
64bit IO Format: %lld

题目描述

Bob has three integers n, k, D .

For a non-negative integer sequence $a_{1\dots n}$, we denote the weight of it is:

$$\frac{D!}{\prod_{i=1}^n (a_i+k)!}$$

Now Bob wants to know the sum of the weight of all of the sequences $a_{1\dots n}$ which satisfies the following conditions:

- 1. $\forall i \in [1, n], a_i \geq 0$
- 2. $\sum_{i=1}^n a_i = D$

If the answer is irreducible fraction $\frac{x}{y}$, you need to output an integer d in $[0, 998244352]$ which satisfies $d \times y \bmod 998244353 = x \bmod 998244353$.

It's guaranteed that $y \bmod 998244353 \neq 0$.

输入描述:

The first line has three integers n, k, D .

$1 \leq n \leq 50$.

$0 \leq k \leq 50$.

$0 \leq D \leq 10^8$.

输出描述:

Output the answer.

示例1

输入

3 1 5

输出

748683282