

## Problem E. Easy One

Input file: *standard input*  
Output file: *standard output*  
Time limit: 3 seconds  
Memory limit: 512 mebibytes

You have a sequence of digits 1 and 2. In one step you can:

1. Insert 1 in a place which is to the right of every other 1 (or anywhere if there are no 1s).
2. Transform any 2 into 1, if there are no 1s to the right of this 2.
3. Delete the rightmost 1 (note that this operation is inverse to the operation 1).
4. Transform the rightmost 1 into 2 (note that this operation is inverse to the operation 2).

For example, you can obtain the following sequences in one step from the sequence 11212122:

- With operation 1: 112121122, 112121212, 112121221.
- With operation 2: 11212112, 11212121.
- With operation 3: 1121222.
- With operation 4: 1121222.

Your task is to calculate the number of ways to transform a sequence of exactly  $a$  digits 2 to a sequence of exactly  $b$  digits 2, using exactly  $t$  operations.

### Input

The only line of the input contains three integers  $a$ ,  $b$ , and  $t$  ( $0 \leq a, b, t \leq 10^6$ ).

### Output

Output the number of ways to obtain a sequence of  $b$  digits 2 from a sequence of  $a$  digits 2 in exactly  $t$  steps. As this number can be very large, output it modulo prime number 998 244 353.

### Examples

standard input	standard output
0 0 4	3
1 4 6	60

### Note

In the first sample you should obtain an empty sequence from an empty sequence in 4 steps. Ways to do this are ( $\varepsilon$  stands for empty sequence):

$$\begin{aligned}\varepsilon &\rightarrow 1 \rightarrow \varepsilon \rightarrow 1 \rightarrow \varepsilon \\ \varepsilon &\rightarrow 1 \rightarrow 11 \rightarrow 1 \rightarrow \varepsilon \\ \varepsilon &\rightarrow 1 \rightarrow 2 \rightarrow 1 \rightarrow \varepsilon\end{aligned}$$