

# Equations

Find the number of positive integral solutions for the equations

$$\frac{1}{x} + \frac{1}{y} = \frac{1}{N!}$$

**Input Format**

An integer N

**Output Format**

The number of positive integral solutions for the above equation modulo 1000007

**Constraints**

$$1 \leq N \leq 10^6$$

**Sample Input00**

1

**Sample Output00**

1

**Sample Input01**

32327

**Sample Output01**

656502

**Sample Input02**

40921

**Sample Output02**

686720