7/15/25, 10:36 PM E - Count A%B=C

 $\label{lem:contest} Contest Duration: 2025-07-12(Sat) 08:00 (http://www.timeanddate.com/worldclock/fixedtime.html? \\ iso=20250712T2100&p1=248) - 2025-07-12(Sat) 09:40 (http://www.timeanddate.com/worldclock/fixedtime.html? \\ iso=20250712T2240&p1=248) (local time) (100 minutes) \\ Back to Home (/home) \\ \end{tabular}$ 

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## E - Count A%B=C

Editorial (/contests/abc414/tasks/abc414\_e/editorial)

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Time Limit: 2 sec / Memory Limit: 1024 MiB

Score: 475 points

#### **Problem Statement**

Find the number, modulo 998244353, of integer tuples (a,b,c) that satisfy the following conditions.

- $1 \le a, b, c \le N$
- a, b, c are pairwise distinct.
- The remainder when a is divided by b is equal to c.

#### **Constraints**

- $3 \le N \le 10^{12}$
- ullet N is an integer.

### Input

The input is given from Standard Input in the following format:

2025-07-15 (Tue) 22:36:24 -04:00 N

## **Output**

Output the answer in one line.

## Sample Input 1

Сору

7

## Sample Output 1



12

Copy

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There are 12 integer tuples (a, b, c) that satisfy the conditions:

- (3,2,1)
- (4,3,1)
- (5,2,1)
- (5,3,2)
- (5,4,1)
- (6,4,2)
- (6,5,1)
- (7,2,1)
- (7,3,1)
- (7,4,3)
- (7,5,2)
- (7,6,1)

# Sample Input 2

Сору

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441

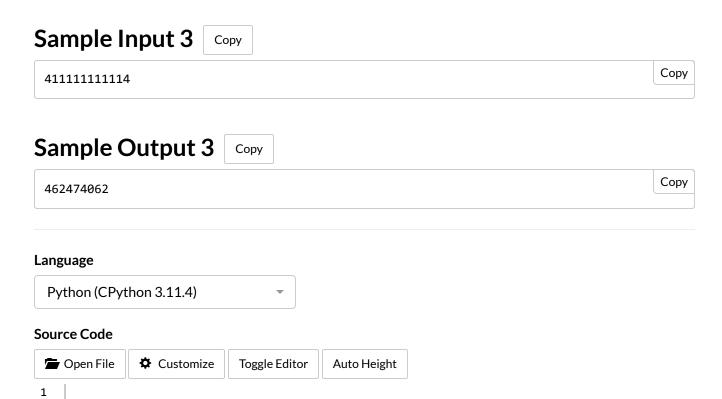
Copy

## Sample Output 2

94700

2025-07-15 (Pue) 22:36:24 -04:00

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\* at most 512 KiB



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