

Sword Art Online Judge

Time limit: 1.0s **Memory limit:** 256M

"This, might be an online judge, but it isn't meant to be played" - 『Sword Art Online Judge』, Programmers: Guanzhong Chen, Tudor Brindus, Timothy Li

Folklore

A massive server made of silicon and steel floating in an endless sky.

That was all this judge was.

It took a varied group of programmers one month to survey the place; the number of problems was about 400 — large enough that even the most talented programmers would take days to get through it all. On another page, there were a great number of users stacked directly on top of each other; its sheer size was unbelievable. It was impossible to even guess how much data it consisted of.

Inside, there were a couple of large contests, countless small external contests, rankings, ratings, and even **problem statements that had no relation to the actual problem**. Only one navbar linked each page to another, and the content were on pages where large amounts of HTML roamed, so discovering and getting through was no easy matter. However, once someone broke through and arrived at a solution in a problem, the «Submission Status Page» there and the user page would connect, making it possible for anyone to gain points by solving problems.

Under these conditions, the huge judge had been steadily conquered over one year. The front line is currently on 3137 total points.

The name of the judge was the «Sword Art Online Judge»; a floating world of battles with code that had engulfed approximately one thousand people. Otherwise known as...

«SAO::J»

Input Specification

One integer, N ($0 \leq N \leq 10\,000$).

Output Specification

The output should not have leading zeroes.

Sample Input 1

27

Sample Output 1

695217590

Sample Input 2

24

Sample Output 2

754740700

Sample Input 3

14

Sample Output 3

19092295

Sample Input 4

4

Sample Output 4

4890