Lyndon's Golf Contest 1 P2 - A Cube Problem

Time limit: 2.0s **Memory limit:** 256M

Your friend needs you to help him golf his coding assignment! The problem is as follows:

> Given an integer n $(1 \leq n \leq 10^6)$, calculate the sum of the first n cubes: $1^3 + 2^3 + \cdots + n^3$.

Note: You may only submit to this problem in Python 3.

Input Specification

The first line of input contains a single integer n.

Output Specification

Output the sum of the first n cubes.

Scoring

Your score will be computed based on the **length of your source code**, the shorter the better. For an L-byte program,

- if $L \leq 34$, you will receive the full 100 points.
- if $35 \leq L \leq 37$, you will receive $80 - 10 \times (L - 35)$ points.
- if $38 \leq L$, you will receive $\lfloor 2^{0.26(60-L)} \rfloor$ points.

Sample Input

```
4
```

Sample Output

```
100
```