AlphaBit Coding Challenge

Problem 2: Big Sum

Statement

Given a positive number N, calculate the summation of the N first integer numbers.

$$1 + 2 + 3 + \ldots + (N-1) + N$$

We guarantee that the sum is $< 2^{63}$

Input

A single line that contains a positive integer number N.

Output

A single line that contains the summation of the first N numbers.

Example

Input	Output
22	253