

N-Sum

memory limit: 32 MB

time limit: 1 s

Let x be the summation of integers $1, 2, 3, \dots, n$. You have to write a program that read an integer value of n from standard input, determine the summation and write the result onto standard output.

Input

Line 1: an integer n ($1 \leq n \leq 1000$)

Output

Line 1: the summation result (x)

Example

Input

10

Output

55