1. The Rise of Vandu Murugan

Vandu Murugan is a lawyer in the district court. He was insulted by the Judge as he stumbled on his words("Enna innaiku romba jaam aavudhu") while speaking for his client because he forgot the specific section and article his case involves. So Mr.vandu decides to learn the sections in constitution law daily.As, vandu's learning improves day by day he can learn one section more than what he learned the previous day.
He learns 1 section on first day,
2 new sections on second day,
3 new sections on the third day and so on.

Vandu wants to know how many sections he can learn in total in a given **N** days.

Input Format :

First line contains integer **N** which represents the number of days.

Output Format:

Print an Integer - number of articles that he can learn in **N** days.

Constraints

0 < **N** <= 80

Sample Input 1:

4

Sample output 1:

10

Explanation 1:

He learns 1+2+3+4 = 10 sections in 4 days.

Test cases

Sample test case 1 :

        Input   : 7
        Output : 28

Sample test case 2:

        Input   : 50
        Output : 1275

Sample test case 3 :

        Input   : 9
        Output : 45

Sample test case 4 :

        Input   : 17
        Output : 153

Sample test case 5 :

        Input   : 22
        Output : 253

Sample test case 6 :

        Input   : 31
        Output : 496

Sample test case 7 :

        Input   : 45
        Output : 1035

Sample test case 8 :

        Input   : 65
        Output : 2145

Sample test case 9 :

        Input   : 69
        Output : 2415

Sample test case 10 :

        Input   : 70
        Output : 2485

2. Chaari and Anniyan

Chaari with his higher official in Crime Investigation Department is investigating a serial killer "ANNIYAN" who kills people that cheats the government or public.Chaari found a wooden plank on which written a word "miruginajumbo" which is the clue for the punishment he used to kill the victim.Now the crime department must find all possible words and check if any of them exists in "GARUDAPURANA" with the help of chaari's friend ambi.So,help them to find the number of all possible words with the given string.
(Note:All characters in the string are lower case)

Example:

Let the string be "adn" then the possibilities are "**adn**","**and**","**dan**","**dna**","**nad**","**nda**" - **6** possibilities.

Let the string be "aba". The possible permutations for the given string are "**aba**","**aab**","**baa**","baa","aba" and "aab". But we get only 3 unique strings and the remaining strings are duplicates of others . So the output is **3.**

If the string on the wooden plank is "munthiripakoda",then the possible words are,. "Thirimundapako","uminrhpodakita",..etc .

Input Format :

A single string ,**s**

Output format :

Print the number of possible words that can be formed with the letters

Constraints :

1≤ length of s ≤ 15

Sample input 1:

bagambikum

Sample output 1:

453600

Explantation 1:

Possible words are "bikumbagam", "Kumbibagam","amgabkumbi"...etc,
All possible words of 453600.

Sample test cases :

Sample test case 1 :
Input   : salmali
Output :1260

Sample test case 2:
Input   : paryavartanakam
Output : 908107200

Sample test case 3:
Input   : raksobjaksam
Output :19958400

Sample test case 4:
Input   : saitarani
Output : 30240

Sample test case 5:
Input   : andhakupam
Output : 604800

Sample test case 6:
Input   : pranarodham
Output : 3326400

Sample test case 7:
Input   : dandasukam
Output : 302400

Sample test case 8:
Input   : vajrakandaka
Output : 1995840

Sample test case 9:
Input   : andhatamtrsam
Output : 64864800

Sample test case 10:
Input   : avichi
Output : 360