**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.

**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 : Vaitarani

Output : 30240

**Sample test case 5:**

Input : Andhakupam

Output : 1814400

**Sample test case 6:**

Input : Pranarodham

Output : 3326400

**Sample test case 7:**

Input : Dandasukam

Output : 604800

**Sample test case 8:**

Input : Vajrakandaka

Output : 1995840

**Sample test case 9:**

Input : Andhatamtrsam

Output : 259459200

**Sample test case 10:**

Input : Avichi

Output : 360