Problem 5: Bob's Blocks

(Easy)

Bob and the other builders are building a sculpture which involves stacking cubes on top of each other. The bottom cube has side length N metres, the cube above that has side length $N-1$ metres, the cube above *that* has side length $N-2$ metres, and so on. The top cube has side length 1 metres.

As project lead, Bob wants to know (i) how high the structure will be and (ii) how much material they will need (that is, the volume of the structure). He has consulted you to solve the problem.

Input Format

The only line in the input contains a single integer N.

Constraints

$1 \leq N \leq 40$ (It appears that Bob and the other builders *don't* want to exceed the height of the Burj Khalifa).

Output Format

The only line of output should contain the height of the structure and the volume of the structure in that order, separated by a space.

Sample Input

```
4
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Sample Output

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10 100
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