CODEFORCES
Sponsored by **TON**

HOME   TOP   CATALOG   **CONTESTS**   GYM   PROBLEMSET   GROUPS   RATING   EDU   API   CALENDAR   HELP

PROBLEMS   SUBMIT CODE   MY SUBMISSIONS   STATUS   STANDINGS   CUSTOM INVOCATION

C. Lucky Numbers

time limit per test: 0.5 seconds

memory limit per test: 64 megabytes

input: standard input

output: standard output

The numbers of all offices in the new building of the Tax Office of IT City will have lucky numbers.

Lucky number is a number that consists of digits 7 and 8 only. Find the maximum number of offices in the new building of the Tax Office given that a door-plate can hold a number not longer than n digits.

Input

The only line of input contains one integer n ($1 \le n \le 55$) — the maximum length of a number that a door-plate can hold.

Output

Output one integer — the maximum number of offices, than can have unique lucky numbers not longer than n digits.

Examples

input	Copy
2	

output	Copy
6	

Experimental Educational Round: VolBIT Formulas Blitz

Finished

Practice

⭐

→ Virtual participation ⌄

Virtual contest is a way to take part in past contest, as close as possible to participation on time. It is supported only ICPC mode for virtual contests. If you've seen these problems, a virtual contest is not for you - solve these problems in the archive. If you just want to solve some problem from a contest, a virtual contest is not for you - solve this problem in the archive. Never use someone else's code, read the tutorials or communicate with other person during a virtual contest.

[Start virtual contest]

→ Clone Contest to Mashup ⌄

You can clone this contest to a mashup.

[Clone Contest]

→ Submit?

Language: [GNU G++20 13.2 (64 bit, win ⌄]

Choose file: [Choose File] No file chosen

[Submit]

→ Last submissions

Submission	Time	Verdict
258821225	Apr/30/2024 09:42	**Accepted**

→ Problem tags

combinatorics   math   *1100

No tag edit access

→ Contest materials

- Announcement #1 (ru) ✕
- 23604 (en) ✕
- 24160 (en) ✕
- Tutorial #2 (oth) ✕
- Tutorial #3 (ru) ✕

Supported by