# H. Benches

time limit per test: 0.5 seconds
memory limit per test: 64 megabytes
input: standard input
output: standard output

The city park of IT City contains $n$ east to west paths and $n$ north to south paths. Each east to west path crosses each north to south path, so there are $n^2$ intersections.

The city funded purchase of five benches. To make it seems that there are many benches it was decided to place them on as many paths as possible. Obviously this requirement is satisfied by the following scheme: each bench is placed on a cross of paths and each path contains not more than one bench.

Help the park administration count the number of ways to place the benches.

## Input

The only line of the input contains one integer $n$ ($5 \le n \le 100$) — the number of east to west paths and north to south paths.

## Output

Output one integer — the number of ways to place the benches.

### Examples

| input |
| --- |
| 5 |
| **output** |
| 120 |