

## April Fools Day Contest 2022

### A. Who Tested?

time limit per test: 1 second  
 memory limit per test: 256 megabytes  
 input: standard input  
 output: standard output



### B. Mike's Sequence

time limit per test: 1 second  
 memory limit per test: 256 megabytes  
 input: standard input  
 output: standard output

You won't find this sequence on OEIS.

#### Input

One integer  $r$  ( $-45 \leq r \leq 2999$ ).

#### Output

One integer.

#### Example

input
2999
output
3000

### C. Pōja Verdon

time limit per test: 1 second  
 memory limit per test: 256 megabytes  
 input: standard input  
 output: standard output

Aenar has an array  $a$  consisting of  $n$  integers.

#### Input

The first line is the integer  $n$  ( $1 \leq n \leq 100$ ).

The second line contains  $n$  integers  $a_i$  ( $0 \leq a_i \leq 3979$ ) — the contents of the array.

#### Output

Output a single number.

### D. Is it rated - 3

time limit per test: 1 second  
 memory limit per test: 256 megabytes  
 input: standard input  
 output: standard output

Input

The first line contains a string  $S$ .

The second line contains an integer  $X$ .

Constraints

- $|S| = 3$
- $0 \leq X \leq 10^9$
- The input is guaranteed to be valid.

E. Are You Safe?

time limit per test: 1 second  
memory limit per test: 256 megabytes  
input: standard input  
output: standard output

Seven boys and seven girls from Athens were brought before King Minos. The evil king laughed and said "I hope you enjoy your stay in Crete".

With a loud clang, the doors behind them shut, and darkness reigned. The terrified children huddled together. In the distance they heard a bellowing, unholy roar.

Bravely, they advanced forward, to their doom.

Input

$n$  ( $1 \leq n \leq 100$ ) — the dimensions of the labyrinth.

Each of the next  $n$  lines contains a string of lowercase English letters of length  $n$ .

Example

input
10 atzxcodera mzhappyayc mineodteri trxesonaac mtollexcxc hjikeoutlc eascripsni rgvymnjcxm onzazswswg geothermal
output
YES

F. In Every Generation...

time limit per test: 1 second  
memory limit per test: 256 megabytes  
input: standard input  
output: standard output

*In every generation there is a Chosen One. She alone will stand against the vampires, the demons, and the forces of darkness. She is the Slayer.* — Joss Whedon

Input

A string  $s$  ( $3 \leq |s| \leq 7$ ) consisting of lowercase English letters.

Output

A single string. If there is no answer, print "none" (without the quotes).

Example

input
tourist
output
ooggqjx

G. Six Characters

time limit per test: 1 second  
memory limit per test: 256 megabytes  
input: standard input  
output: standard output

Aenar should go to the string's home.

**Input**

A string consisting of only 6 letters.

**Output**

A string consisting of only 6 characters.

**Note**

If many answers are possible, the jury will **still only accept one!**

## H. Cross-Language Program

time limit per test: 2 seconds

memory limit per test: 256 megabytes

input: standard input

output: standard output

Write a program that is compilable simultaneously in two languages: C++ (GCC 10.3.1, -std=c++11) and FreePascal (3.0.4).

It absolutely does not matter what this program does, the only requirement is that it successfully compiles into an executable file in both C++ and Pascal.

Please use the language Text to submit your solution. Just choose Text as a language in the submission form.

The submitted file can't exceed 2048 bytes. It should compile fast on both compilers.

**Input**

No input.

**Output**

No output.