

Magic Spell

Time limit: 1000 ms
Memory limit: 256 MB



Write a program that gives the correct output for a legal input – to discover the correct function see the input/output examples.

Standard Input

The first line contains an integer N . Each of the following N lines will contain a legal string.

Standard output

Print the answer on the first line. It is guaranteed that it can be represented as a signed 64 integer.

Input

```
2
yep momr
momr rohjy drbrm
```

Output

```
99999
```

```
3
yep pmr
pmr momr drbrm
yep xrtp gobr momr
```

```
111222111
```