Gemstones

Problem Statement

John has discovered various rocks. Each rock is composed of various elements, and each element is represented by a lower-case Latin letter from 'a' to 'z'. An element can be present multiple times in a rock. An element is called a *gem-element* if it occurs at least once in each of the rocks.

Given the list of N rocks with their compositions, display the number of gem-elements that exist in those rocks.

Input Format

The first line consists of an integer, N, the number of rocks.
Each of the next N lines contains a rock's composition. Each composition consists of lower-case letters of English alphabet.

Constraints
$1 \leq N \leq 100$
Each composition consists of only lower-case Latin letters ('a'-'z').
$1 \leq$ *length of each composition* ≤ 100

Output Format

Print the number of gem-elements that are common in these rocks. If there are none, print 0.

Sample Input

```
3
abcdde
baccd
eeabg
```

Sample Output

```
2
```

Explanation

Only "a" and "b" are the two kinds of gem-elements, since these are the only characters that occur in every rock's composition.