

Gem Stones



John has discovered various rocks. Each rock is composed of various elements, and each element is represented by a lowercase 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 **N**, the number of rocks.

Each of the next **N** lines contain rocks' composition. Each composition consists of lowercase letters of English alphabet.

Output Format

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

Constraints

$$1 \leq N \leq 100$$

Each composition consists of only small latin letters ('a'-'z').

$$1 \leq \text{Length of each composition} \leq 100$$

Sample Input

```
3
abcdde
baccd
eeabg
```

Sample Output

```
2
```

Explanation

Only "a", "b" are the two kind of gem-elements, since these are the only characters that occur in each of the rocks' composition.