

# Gemstones

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').  
 $1 \leq \text{length of each composition} \leq 100$

## 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.