John has collected various rocks. Each rock has various minerals embeded in it. Each type of mineral is designated by a lowercase letter in the range $ascii[a - z]$. There may be multiple occurrences of a mineral in a rock. A mineral is called a *gemstone* if it occurs at least once in each of the rocks in John's collection.

Given a list of minerals embedded in each of John's rocks, display the number of types of gemstones he has in his collection.

For example, the array of mineral composition strings $arr = [\text{abc, abc, bc}]$. The minerals b and c appear in each composite, so there are 2 gemstones.

Function Description

Complete the *gemstones* function in the editor below. It should return an integer representing the number of gemstones found in the list of rocks.

gemstones has the following parameter(s):

- *arr*: an array of strings

Input Format

The first line consists of an integer n, the size of arr.
Each of the next n lines contains a string $arr[i]$ where each letter represents an occurence of a mineral in the current rock.

Constraints

$1 \leq n \leq 100$
$1 \leq$ | arr[i] | ≤ 100
Each composition $arr[i]$ consists of only lower-case Latin letters ('a'-'z').

Output Format

Print the number of types of gemstones in John's collection. If there are none, print 0.

Sample Input

```
3
abcdde
baccd
eeabg
```

Sample Output

```
2
```

Explanation

Only a and b are gemstones because they are the only types that occur in every rock.