Gemstones

HackerRank

There is a collection of rocks where 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 the collection.

Given a list of minerals embedded in each of the rocks, display the number of types of gemstones in the collection.

Example
$arr = [\text{'abc'}, \text{'abc'}, \text{'bc'}]$

The minerals b and c appear in each rock, so there are 2 gemstones.

Function Description

Complete the *gemstones* function in the editor below.

gemstones has the following parameter(s):

- *string arr[n]:* an array of strings

Returns

- *int:* the number of gemstones found

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').

Sample Input

```
STDIN       Function
-----       --------
3           arr[] size n = 3
abcdde      arr = ['abcdde', 'baccd', 'eeabg']
baccd
eeabg
```

Sample Output

```
2
```

Explanation

Only a and b occur in every rock.