Problem 929: Unique Email Addresses

Problem Information

Difficulty: Easy
Acceptance Rate: 67.73%
Paid Only: No
Tags: Array, Hash Table, String

Problem Description

Every **valid email** consists of a **local name** and a **domain name** , separated by the `'@'` sign. Besides lowercase letters, the email may contain one or more `'.'` or `'+'`.

* For example, in `"alice@leetcode.com"`, `"alice"` is the **local name** , and `"leetcode.com"` is the **domain name**.

If you add periods `'.'` between some characters in the **local name** part of an email address, mail sent there will be forwarded to the same address without dots in the local name. Note that this rule **does not apply** to **domain names**.

* For example, `"alice.z@leetcode.com"` and `"alicez@leetcode.com"` forward to the same email address.

If you add a plus `'+'` in the **local name** , everything after the first plus sign **will be ignored**. This allows certain emails to be filtered. Note that this rule **does not apply** to **domain names**.

* For example, `"m.y+name@email.com"` will be forwarded to `"my@email.com"`.

It is possible to use both of these rules at the same time.

Given an array of strings `emails` where we send one email to each `emails[i]`, return _the number of different addresses that actually receive mails_.

Example 1:

Input: emails = ["test.email+alex@leetcode.com","test.e.mail+bob.cathy@leetcode.com","testemail+david@lee.tcode.com"] **Output:** 2 **Explanation:** "testemail@leetcode.com" and "testemail@lee.tcode.com" actually receive mails.

Example 2:

Input: emails = ["a@leetcode.com","b@leetcode.com","c@leetcode.com"] **Output:** 3

Constraints:

* `1 <= emails.length <= 100` * `1 <= emails[i].length <= 100` * `emails[i]` consist of lowercase English letters, `'+'`, `'.'` and `'@'`. * Each `emails[i]` contains exactly one `'@'` character. * All local and domain names are non-empty. * Local names do not start with a `'+'` character. * Domain names end with the `".com"` suffix. * Domain names must contain at least one character before `".com"` suffix.

Code Snippets

C++:

```
class Solution {
public:
int numUniqueEmails(vector<string>& emails) {

}
};
```

Java:

```
class Solution {
public int numUniqueEmails(String[] emails) {

}
}
```

Python3:

```
class Solution:
def numUniqueEmails(self, emails: List[str]) -> int:
```