

6094. Naming a Company

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You are given an array of strings `ideas` that represents a list of names to be used in the process of naming a company. The process of naming a company is as follows:

User Accepted:	0
User Tried:	0
Total Accepted:	0
Total Submissions:	0
Difficulty:	Hard

- Choose 2 **distinct** names from `ideas`, call them `ideaA` and `ideaB`.
- Swap the first letters of `ideaA` and `ideaB` with each other.
- If **both** of the new names are not found in the original `ideas`, then the name `ideaA ideaB` (the **concatenation** of `ideaA` and `ideaB`, separated by a space) is a valid company name.
- Otherwise, it is not a valid name.

Return the number of **distinct** valid names for the company.

Example 1:

Input: `ideas = ["coffee","donuts","time","toffee"]`
Output: 6
Explanation: The following selections are valid:
- ("coffee", "donuts"): The company name created is "doffee conuts".
- ("donuts", "coffee"): The company name created is "conuts doffee".
- ("donuts", "time"): The company name created is "tonuts dime".
- ("donuts", "toffee"): The company name created is "tonuts doffee".
- ("time", "donuts"): The company name created is "dime tonuts".
- ("toffee", "donuts"): The company name created is "doffee tonuts".
Therefore, there are a total of 6 distinct company names.

The following are some examples of invalid selections:
- ("coffee", "time"): The name "toffee" formed after swapping already exists in the original array.
- ("time", "toffee"): Both names are still the same after swapping and exist in the original array.
- ("coffee", "toffee"): Both names formed after swapping already exist in the original array.

Example 2:

Input: `ideas = ["lack","back"]`
Output: 0
Explanation: There are no valid selections. Therefore, 0 is returned.

Constraints:

- 2 <= `ideas.length` <= 5 * 10⁴
- 1 <= `ideas[i].length` <= 10
- `ideas[i]` consists of lowercase English letters.
- All the strings in `ideas` are **unique**.

JavaScript

📄 ↺ ⚙

```
1  const initialize2DArray = (n, m) => { let d = []; for (let i = 0; i < n; i++) { let t = Array(m).fill(0); d.push(t); }
2  return d; };
3  const char = (ascii) => String.fromCharCode(ascii);
4  const ord = (c) => c.charCodeAt();
5  const distinctNames = (ideas) => {
6      let se = new Set(ideas), cnt = initialize2DArray(26, 26), res = 0;
7      for (const s of ideas) {
8          for (let i = 97; i <= 122; i++) {
9              let c = char(i), t = c + s.slice(1);
10             if (!se.has(t)) cnt[ord(s[0]) - 97][i - 97]++;
11         }
12     }
13     for (let i = 0; i < 26; i++) {
14         for (let j = 0; j < 26; j++) res += cnt[i][j] * cnt[j][i];
15     }
16     return res;
17 }
```

☐ Custom Testcase

Use Example Testcases

Run

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Submission Result: **Accepted** (/submissions/detail/720320583/) ⓘ

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