Problem 290: Word Pattern

Problem Information

Difficulty: Easy
Acceptance Rate: 43.53%
Paid Only: No
Tags: Hash Table, String

Problem Description

Given a `pattern` and a string `s`, find if `s` follows the same pattern.

Here **follow** means a full match, such that there is a bijection between a letter in `pattern` and a **non-empty** word in `s`. Specifically:

* Each letter in `pattern` maps to **exactly** one unique word in `s`. * Each unique word in `s` maps to **exactly** one letter in `pattern`. * No two letters map to the same word, and no two words map to the same letter.

Example 1:

Input: pattern = "abba", s = "dog cat cat dog"

Output: true

Explanation:

The bijection can be established as:

* `'a'` maps to `"dog"`. * `'b'` maps to `"cat"`.

Example 2:

Input: pattern = "abba", s = "dog cat cat fish"

Output: false

Example 3:

Input: pattern = "aaaa", s = "dog cat cat dog"

Output: false

Constraints:

* `1 <= pattern.length <= 300` * `pattern` contains only lower-case English letters. * `1 <= s.length <= 3000` * `s` contains only lowercase English letters and spaces `' '`. * `s` **does not contain** any leading or trailing spaces. * All the words in `s` are separated by a **single space**.

Code Snippets

C++:

```
class Solution {
public:
bool wordPattern(string pattern, string s) {

}
};
```

Java:

```
class Solution {
public boolean wordPattern(String pattern, String s) {

}
}
```

Python3:

```
class Solution:
def wordPattern(self, pattern: str, s: str) -> bool:
```