Problem 2514: Count Anagrams

Problem Information

Difficulty: Hard
Acceptance Rate: 36.66%
Paid Only: No
Tags: Hash Table, Math, String, Combinatorics, Counting

Problem Description

You are given a string `s` containing one or more words. Every consecutive pair of words is separated by a single space `' '`.

A string `t` is an **anagram** of string `s` if the `ith` word of `t` is a **permutation** of the `ith` word of `s`.

* For example, `"acb dfe"` is an anagram of `"abc def"`, but `"def cab"` and `"adc bef"` are not.

Return _the number of**distinct anagrams** of _`s`. Since the answer may be very large, return it **modulo** `109 + 7`.

Example 1:

Input: s = "too hot" **Output:** 18 **Explanation:** Some of the anagrams of the given string are "too hot", "oot hot", "oto toh", "too toh", and "too oht".

Example 2:

Input: s = "aa" **Output:** 1 **Explanation:** There is only one anagram possible for the given string.

Constraints:

* `1 <= s.length <= 105` * `s` consists of lowercase English letters and spaces `' '`. * There is single space between consecutive words.

Code Snippets

C++:

```
class Solution {
public:
int countAnagrams(string s) {

}
};
```

Java:

```
class Solution {
public int countAnagrams(String s) {

}
}
```

Python3:

```
class Solution:
def countAnagrams(self, s: str) -> int:
```