Problem 1312: Minimum Insertion Steps to Make a String Palindrome

Problem Information

Difficulty: Hard
Acceptance Rate: 73.31%
Paid Only: No
Tags: String, Dynamic Programming

Problem Description

Given a string `s`. In one step you can insert any character at any index of the string.

Return _the minimum number of steps_ to make `s` palindrome.

A **Palindrome String** is one that reads the same backward as well as forward.

Example 1:

Input: s = "zzazz" **Output:** 0 **Explanation:** The string "zzazz" is already palindrome we do not need any insertions.

Example 2:

Input: s = "mbadm" **Output:** 2 **Explanation:** String can be "mbdadbm" or "mdbabdm".

Example 3:

Input: s = "leetcode" **Output:** 5 **Explanation:** Inserting 5 characters the string becomes "leetcodocteel".

Constraints:

* `1 <= s.length <= 500` * `s` consists of lowercase English letters.

Code Snippets

C++:

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

}
};
```

Java:

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

}
}
```

Python3:

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