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.