# 2486. Append Characters to String to Make Subsequence

# Description

You are given two strings s and t consisting of only lowercase English letters.

Return the minimum number of characters that need to be appended to the end of s so that t becomes a subsequence of s.

A subsequence is a string that can be derived from another string by deleting some or no characters without changing the order of the remaining characters.

### **Example 1:**

```
Input: s = "coaching", t = "coding"
Output: 4
Explanation: Append the characters "ding" to the end of s so that s = "coachingding".
Now, t is a subsequence of s (" co aching ding ").
It can be shown that appending any 3 characters to the end of s will never make t a subsequence.
```

#### Example 2:

```
Input: s = "abcde", t = "a"
Output: 0
Explanation: t is already a subsequence of s (" a bcde").
```

# Example 3:

```
Input: s = "z", t = "abcde"
Output: 5
Explanation: Append the characters "abcde" to the end of s so that s = "zabcde".
Now, t is a subsequence of s ("z abcde ").
It can be shown that appending any 4 characters to the end of s will never make t a subsequence.
```

## **Constraints:**

- 1 <= s.length, t.length <=  $10^{5}$
- s and t consist only of lowercase English letters.