Problem 2109: Adding Spaces to a String

Problem Information

Difficulty: Medium
Acceptance Rate: 71.74%
Paid Only: No
Tags: Array, Two Pointers, String, Simulation

Problem Description

You are given a **0-indexed** string `s` and a **0-indexed** integer array `spaces` that describes the indices in the original string where spaces will be added. Each space should be inserted **before** the character at the given index.

* For example, given `s = "EnjoyYourCoffee"` and `spaces = [5, 9]`, we place spaces before `'Y'` and `'C'`, which are at indices `5` and `9` respectively. Thus, we obtain `"Enjoy **_Y_** our _**C**_ offee"`.

Return****_the modified string**after** the spaces have been added._

Example 1:

Input: s = "LeetcodeHelpsMeLearn", spaces = [8,13,15] **Output:** "Leetcode Helps Me Learn" **Explanation:** The indices 8, 13, and 15 correspond to the underlined characters in "Leetcode _**H**_ elps _**M**_ e _**L**_ earn". We then place spaces before those characters.

Example 2:

Input: s = "icodeinpython", spaces = [1,5,7,9] **Output:** "i code in py thon" **Explanation:** The indices 1, 5, 7, and 9 correspond to the underlined characters in "i _**c**_ ode _**i**_ n _**p**_ y _**t**_ hon". We then place spaces before those characters.

Example 3:

Input: s = "spacing", spaces = [0,1,2,3,4,5,6] **Output:** " s p a c i n g" **Explanation:**
We are also able to place spaces before the first character of the string.

Constraints:

* `1 <= s.length <= 3 * 105` * `s` consists only of lowercase and uppercase English letters. * `1
<= spaces.length <= 3 * 105` * `0 <= spaces[i] <= s.length - 1` * All the values of `spaces` are
strictly increasing.

Code Snippets

C++:

```cpp
class Solution {
public:
string addSpaces(string s, vector<int>& spaces) {


}
};
```

Java:

```java
class Solution {
public String addSpaces(String s, int[] spaces) {


}
}
```

Python3:

```python
class Solution:
def addSpaces(self, s: str, spaces: List[int]) -> str:
```