

# Problem 3571: Find the Shortest Superstring II

## Problem Information

Difficulty: [Easy](#)

Acceptance Rate: 50.37%

Paid Only: Yes

Tags: String

## Problem Description

You are given **two** strings, `s1` and `s2`. Return the **shortest** `_possible_` string that contains both `s1` and `s2` as substrings. If there are multiple valid answers, return `_any_` one of them.

A **substring** is a contiguous sequence of characters within a string.

**Example 1:**

**Input:** `s1 = "aba", s2 = "bab"`

**Output:** `"abab"`

**Explanation:**

`"abab"` is the shortest string that contains both `"aba"` and `"bab"` as substrings.

**Example 2:**

**Input:** `s1 = "aa", s2 = "aaa"`

**Output:** `"aaa"`

**Explanation:**

`"aa"` is already contained within `"aaa"`, so the shortest superstring is `"aaa"`.

**\*\*Constraints:\*\***

\*`1` <= s1.length <= 100` \*`1` <= s2.length <= 100` \*`s1` and `s2` consist of lowercase English letters only.

## Code Snippets

### C++:

```
class Solution {  
public:  
    string shortestSuperstring(string s1, string s2) {  
  
    }  
};
```

### Java:

```
class Solution {  
    public String shortestSuperstring(String s1, String s2) {  
  
    }  
}
```

### Python3:

```
class Solution:  
    def shortestSuperstring(self, s1: str, s2: str) -> str:
```