

Problem 686: Repeated String Match

Problem Information

Difficulty: Medium

Acceptance Rate: 37.85%

Paid Only: No

Tags: String, String Matching

Problem Description

Given two strings `a` and `b`, return the minimum number of times you should repeat string `a` so that string `b` is a substring of it. If it is impossible for `b` to be a substring of `a` after repeating it, return `-1`.

Notice: string `"abc"` repeated 0 times is `""`, repeated 1 time is `"abc"` and repeated 2 times is `"abcabc"`.

Example 1:

Input: `a = "abcd", b = "cdabcdab"` **Output:** 3 **Explanation:** We return 3 because by repeating a three times `"abcdabcdabcd"`, b is a substring of it.

Example 2:

Input: `a = "a", b = "aa"` **Output:** 2

Constraints:

`1 <= a.length, b.length <= 104` `a` and `b` consist of lowercase English letters.

Code Snippets

C++:

```
class Solution {  
public:  
    int repeatedStringMatch(string a, string b) {  
  
    }  
};
```

Java:

```
class Solution {  
    public int repeatedStringMatch(String a, String b) {  
  
    }  
}
```

Python3:

```
class Solution:  
    def repeatedStringMatch(self, a: str, b: str) -> int:
```