

# Problem 567: Permutation in String

## Problem Information

**Difficulty:** Medium

**Acceptance Rate:** 47.99%

**Paid Only:** No

**Tags:** Hash Table, Two Pointers, String, Sliding Window

## Problem Description

Given two strings `s1` and `s2`, return `true` if `s2` contains a permutation of `s1`, or `false` otherwise.

In other words, return `true` if one of `s1`'s permutations is the substring of `s2`.

**Example 1:**

**Input:** `s1 = "ab", s2 = "eidbaooo"` **Output:** `true` **Explanation:** `s2` contains one permutation of `s1` ("ba").

**Example 2:**

**Input:** `s1 = "ab", s2 = "eidboaoo"` **Output:** `false`

**Constraints:**

`1 <= s1.length, s2.length <= 104` `s1` and `s2` consist of lowercase English letters.

## Code Snippets

**C++:**

```
class Solution {
public:
    bool checkInclusion(string s1, string s2) {
```

```
}  
};
```

### Java:

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

### Python3:

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