

30th 2023

FIRST:-

Check if strings are rotations of each other or not : : Basic

Given two strings s1 and s2. The task is to check if s2 is a rotated version of the string s1. The characters in the strings are in lowercase.

Example 1:

Input:

geeksforgeeks

forgeeksgeeks

Output:

1

Explanation: s1 is geeksforgeeks, s2 is forgeeksgeeks. Clearly, s2 is a rotated version of s1 as s2 can be obtained by left-rotating s1 by 5 units.

Example 2:

Input:

mightandmagic

andmagicmigth

Output:

0

Explanation: Here with any amount of rotation s2 can't be obtained by s1.

Your Task:

The task is to complete the function **areRotations()** which checks if the two

strings are rotations of each other. The function returns true if string 1 can be obtained by rotating string 2, else it returns false.

Expected Time Complexity: $O(N)$.

Expected Space Complexity: $O(N)$.

Note: $N = |s1|$.

Constraints:

$1 \leq |s1|, |s2| \leq 10^7$

CODE SECTION:-

```
bool areRotations(string s1, string s2)
{
    // Your code here

    if (s1.length() != s2.length())
    {
        return false;
    }

    string ans = s1 + s1;

    string ans1 = "";

    int j = 0;

    for (int i = 0; i < ans.length() && j < s1.length(); i++)
    {
        if (ans[i] == s2[j])
        {
            ans1 = ans1 + s2[j];

            j++;
        }
    }

    return ans1 == s2 ? 1 : 0;
}
```

← -: DONE FOR THE DAY :- →