

EXPERIMENT - 2

Student Name: Sandeep Kumar

UID: 20BCS4885

Branch: CSE

Section/Group: 603/A

Semester: 6th semester

Subject: Competitive Coding

Task-1: Rotate String

<https://leetcode.com/problems/rotate-string/description/>

Solution:

Input Code:

```
class Solution {
public:
    bool rotateString(string s, string goal) {

        if(s.length()!=goal.length())
            return false;

        string str = s + s;
        size_t found = str.find(goal);

        if(found != string::npos){
            return true;
        }
        else{
            return false;
        }

    }
};
```

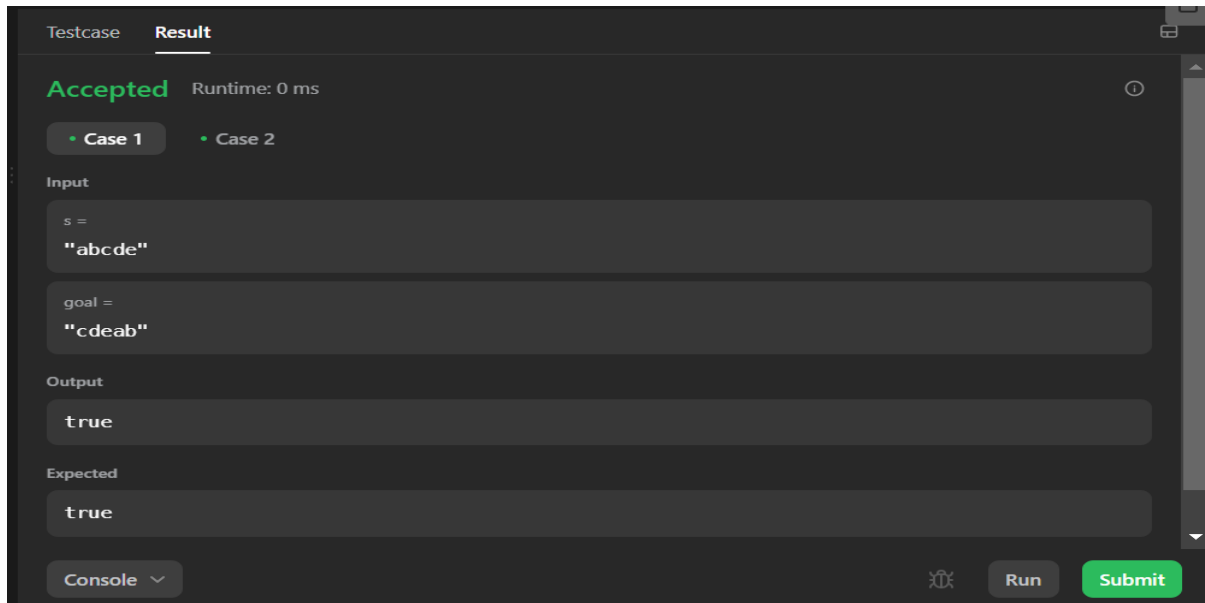
Approach:

Create a new string which will have the double of original.

Ex - s = "abc", then new string str = s + s, which is "abcabc"

now we have to find the goal in str.

Output:



The screenshot shows a code execution environment with a dark theme. At the top, there are tabs for 'Testcase' and 'Result', with 'Result' being the active tab. Below the tabs, the status 'Accepted' is displayed in green, followed by 'Runtime: 0 ms'. There are two test cases listed: 'Case 1' (selected) and 'Case 2'. The 'Input' section shows two variables: 's =' with the value '"abcde"' and 'goal =' with the value '"cdeab"'. The 'Output' section shows the value 'true'. The 'Expected' section also shows the value 'true'. At the bottom, there is a 'Console' dropdown menu, a 'Run' button, and a green 'Submit' button.

Task-2: Repeated String Match

<https://leetcode.com/problems/repeated-string-match/>

Solution:

Input code:

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

        int n= b.length()/a.length();
        string s=a;
        int res= 1;

        for(int i=0;i<=n+1;i++)
        {
            if(s.find(b)!=string::npos)
            {
                return res;
            }
            s+=a;
        }
    }
};
```

```
        res++;  
    }  
    return -1;  
}  
};
```

Complexity:

Time complexity:

$O(n)$

Space complexity:

$O(1)$

Output:

Testcase

Result

Accepted Runtime: 2 ms

• Case 1

• Case 2

Input

a =
"abcd"

b =
"cdabcdab"

Output

3

Expected

3

Console ▾

Run

Submit