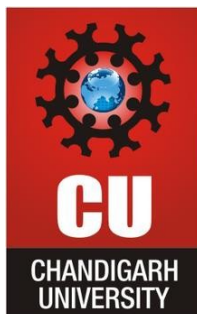


**CHANDIGARH UNIVERSITY
UNIVERSITY INSTITUTE OF ENGINEERING
DEPARTMENT OF COMPUTER SCIENCE & ENGINEERING**



Submitted By: Vivek Kumar(21BCS8129)		Submitted To: Jayesh Surana(E13219)	
Subject Name	Competitive Coding - II		
Subject Code	20CSP-351		
Branch	Computer Science and Engineering		
Semester	6 th		

Experiment No. - 1

Student Name: Vivek Kumar

Branch: BE-CSE(LEET)

Semester: 6th

Subject Name: Competitive coding - II

UID: 21BCS8129

Section/Group: 20BCS-ST-801/B

Date of Performance: 21/02/2023

Subject Code: 20CSP-351

1. Aim/Overview of the practical:

Find the Index of the First Occurance in a String.

Given two strings `needle` and `haystack`, return the index of the first occurrence of `needle` in `haystack`, or -1 if `needle` is not part of `haystack`.

<https://leetcode.com/problems/find-the-index-of-the-first-occurrence-in-a-string/>

2. Apparatus / Simulator Used:

- Windows 7 or above
- Google Chrome

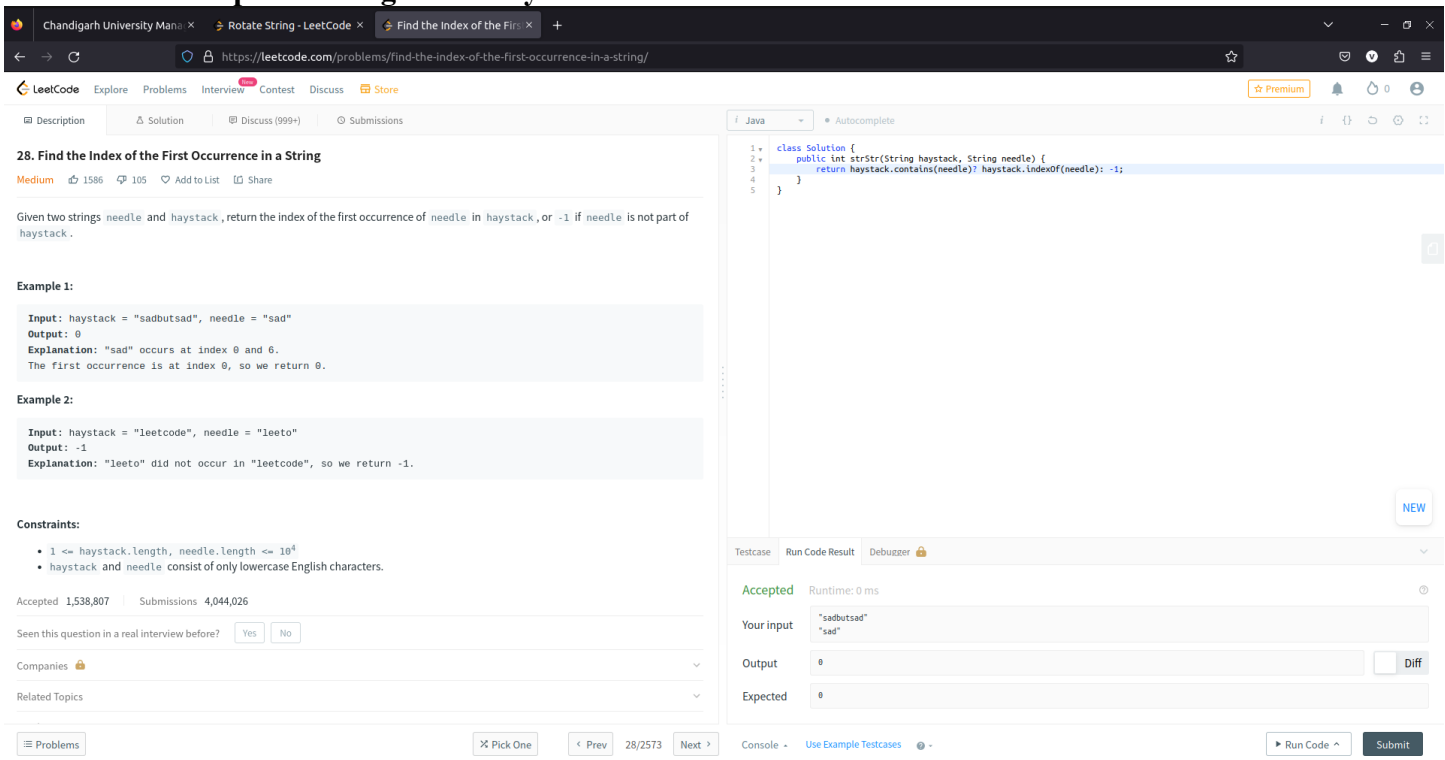
3. Objective:

- To understand the concept of String
- To implement the concept of Occurance Count.

4. Code:

```
class Solution {  
    public int strStr(String haystack, String needle) {  
        return haystack.contains(needle)? haystack.indexOf(needle): -1;  
    }  
}
```

5. Result/Output/Writing Summary:



28. Find the Index of the First Occurrence in a String

Medium 1586 105 Add to List Share

Given two strings `needle` and `haystack`, return the index of the first occurrence of `needle` in `haystack`, or `-1` if `needle` is not part of `haystack`.

Example 1:

Input: `haystack = "sadbutsad", needle = "sad"`
 Output: `0`
 Explanation: "sad" occurs at index 0 and 6. The first occurrence is at index 0, so we return 0.

Example 2:

Input: `haystack = "leetcode", needle = "leeto"`
 Output: `-1`
 Explanation: "leeto" did not occur in "leetcode", so we return -1.

Constraints:

- $1 \leq \text{haystack.length}, \text{needle.length} \leq 10^4$
- `haystack` and `needle` consist of only lowercase English characters.

Accepted 1,538,807 Submissions 4,044,026

Seen this question in a real interview before?

Companies
 Related Topics

```

class Solution {
    public int strStr(String haystack, String needle) {
        return haystack.contains(needle) ? haystack.indexOf(needle) : -1;
    }
}
  
```

Testcase Run Code Result Debuzzer

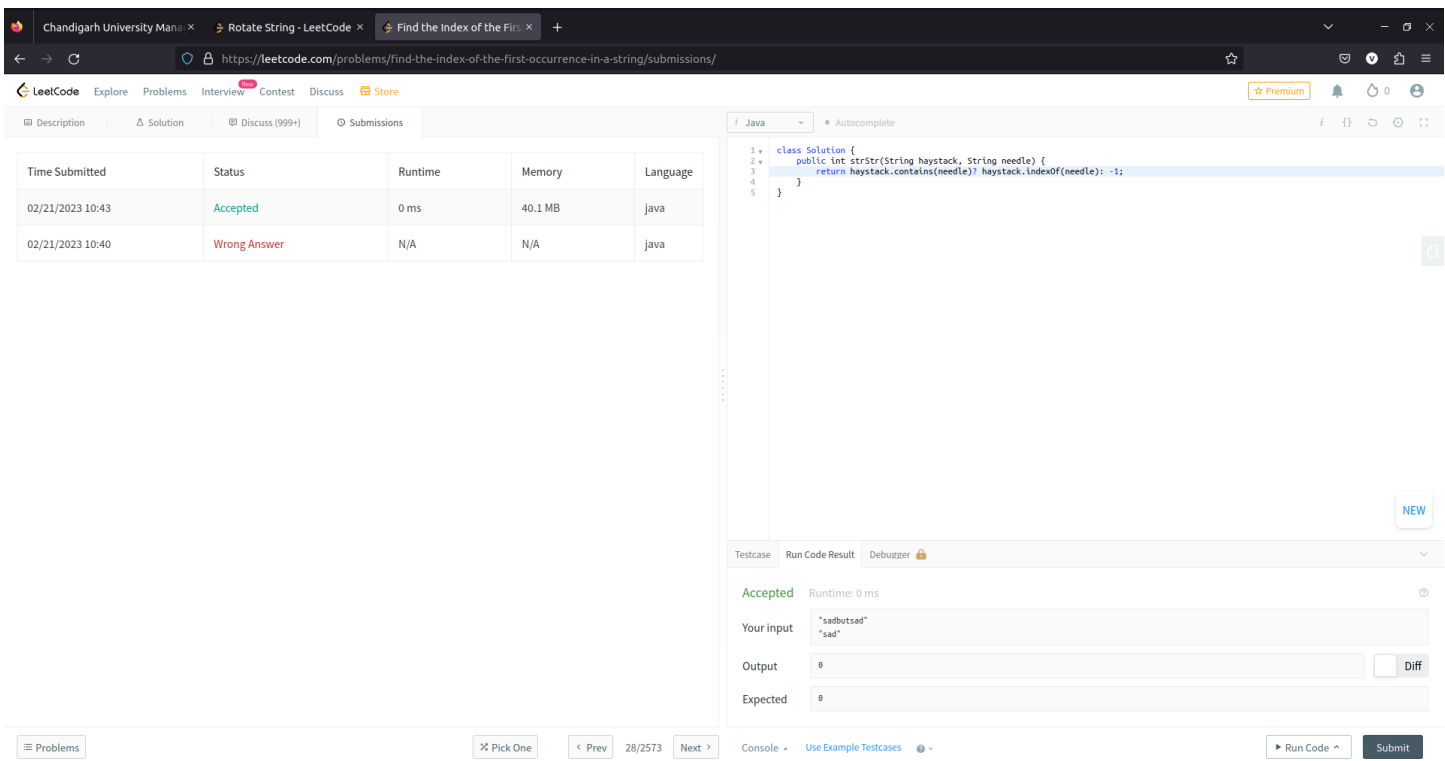
Accepted Runtime: 0 ms

Your input `"sadbutsad"`
`"sad"`

Output `0`

Expected `0`

Console Use Example Testcases



Time Submitted	Status	Runtime	Memory	Language
02/21/2023 10:43	Accepted	0 ms	40.1 MB	java
02/21/2023 10:40	Wrong Answer	N/A	N/A	java

```

class Solution {
    public int strStr(String haystack, String needle) {
        return haystack.contains(needle) ? haystack.indexOf(needle) : -1;
    }
}
  
```

Testcase Run Code Result Debuzzer

Accepted Runtime: 0 ms

Your input `"sadbutsad"`
`"sad"`

Output `0`

Expected `0`

Console Use Example Testcases

1. Aim/Overview of the practical:

Rotate String

Given two strings `s` and `goal`, return `true` if and only if `s` can become `goal` after some number of *shifts* on `s`.

A **shift** on `s` consists of moving the leftmost character of `s` to the rightmost position.

- For example, if `s` = "abcde", then it will be "bcdea" after one shift.

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

2. Apparatus / Simulator Used:

- Windows 7 or above
- Google Chrome

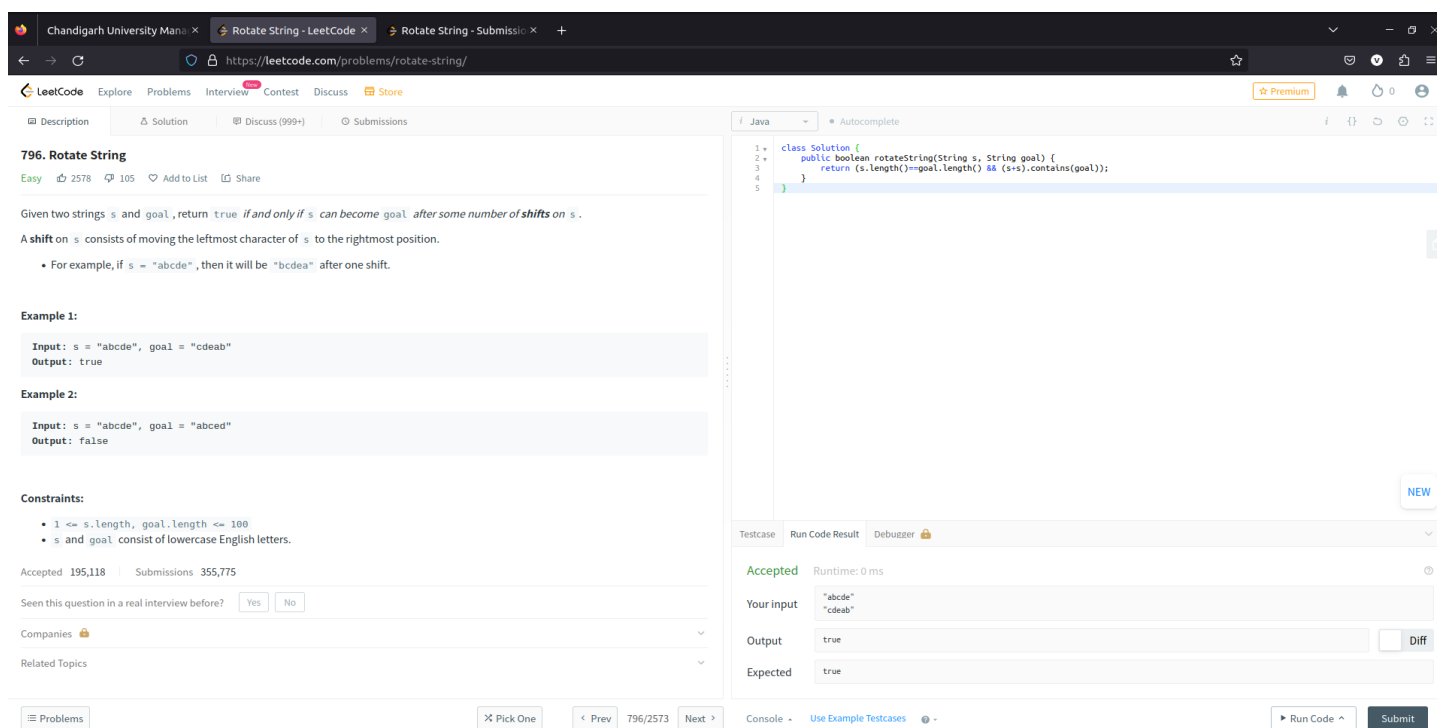
3. Objective:

- To understand the concept of Rotation
- To implement the concept of String.

4. Code:

```
class Solution {
    public boolean rotateString(String s, String goal) {
        return (s.length()==goal.length() && (s+s).contains(goal));
    }
}
```

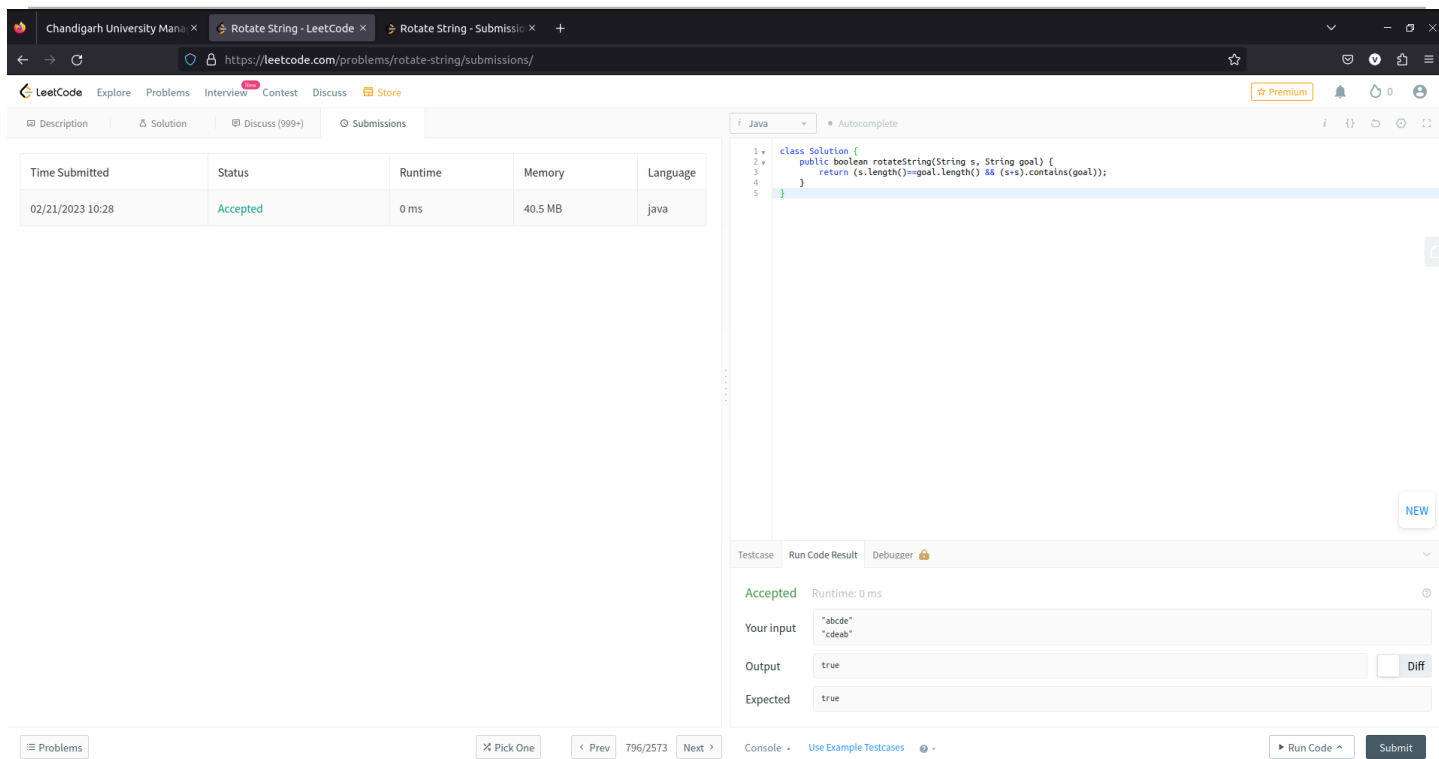
5. Result/Output/Writing Summary:



The screenshot displays the LeetCode interface for the problem "796. Rotate String". On the left, the problem description states: "Given two strings `s` and `goal`, return `true` if and only if `s` can become `goal` after some number of *shifts* on `s`. A **shift** on `s` consists of moving the leftmost character of `s` to the rightmost position. For example, if `s` = "abcde", then it will be "bcdea" after one shift." Examples provided are: Example 1: Input: `s` = "abcde", `goal` = "cdeab", Output: `true`; Example 2: Input: `s` = "abcde", `goal` = "abcd", Output: `false`. Constraints: 1 ≤ `s.length`, `goal.length` ≤ 100; `s` and `goal` consist of lowercase English letters. The right side shows a Java solution:

```
class Solution {
    public boolean rotateString(String s, String goal) {
        return (s.length()==goal.length() && (s+s).contains(goal));
    }
}
```

 Below the code, the test results show "Accepted" with a runtime of 0 ms. The input is "abcde" and "cdeab", the output is "true", and the expected output is "true".



The screenshot shows a web browser with multiple tabs. The active tab is 'Rotate String - LeetCode'. The URL is 'https://leetcode.com/problems/rotate-string/submissions/'. The page shows a submission for the 'Rotate String' problem. The submission is accepted with a runtime of 0 ms and memory usage of 40.5 MB. The code is in Java and uses a HashSet to check if the rotated string is a permutation of the goal string.

```

1 class Solution {
2     public boolean rotateString(String s, String goal) {
3         return (s.length()==goal.length() && (s+s).contains(goal));
4     }
5 }

```

The test case shows 'Your input' as 'abacde' and 'cdeab', and 'Expected' as 'true'. The output is also 'true'.

Learning outcomes (What I have learnt):

- Learned the concept of String.
- Learnt about Array in Occurance and Rotation.

Evaluation Grid (To be created per the faculty's SOP and Assessment guidelines):

Sr. No.	Parameters	Marks Obtained	Maximum Marks
1.	Worksheet completion including writing learning objectives/Outcomes. (To be submitted at the end of the day).		
2.	Post-Lab Quiz Result.		
3.	Student Engagement in Simulation/Demonstration/Performance and Controls/Pre-Lab Questions.		
	Signature of Faculty (with Date):	Total Marks Obtained:	