



**DEPARTMENT OF**

**COMPUTER SCIENCE & ENGINEERING**

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## Experiment - 1.2

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**Branch: BE-CSE**

**Semester: 6**

**Subject Name: Advance Programming lab**

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**Section/Group: 21BCS\_CC\_648\_B**

**Date of Performance: 30-01-2024**

**Subject Code: 21CSP-251**

### 1. Aim:

- Rotate String- Leet Code
- Camel case Matching- LeetCode

### 2. Objective:

- Given two strings and goal, return true if and only if scan 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.
- Given an array of strings queries and a string pattern, return a boolean array answer where answer[i] is true if queries[i] matches pattern, and false otherwise.

### 3. Algo./Approach:

(i)

```
class Solution {
public:

    bool solve(string &s, string &goal)
    {
        if(s.size() > goal.size()) return false;
        if(s.size() < goal.size()) return false;
        s+=s;
        if(s.find(goal) < s.size()) return true;

        return false;
    }

    bool rotateString(string s, string goal)
    {
        return solve(s, goal);
    }
};
```



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Output:-

The screenshot shows a submission interface for a C++ problem. The submission is accepted and was submitted by avinash\_vermaa on Feb 06, 2024 at 10:40. The runtime is 0 ms, and the memory is 7.30 MB. The submission beats 100.00% of users with C++ for runtime and 44.89% for memory. A bar chart shows the submission's performance relative to others. The code is as follows:

```
class Solution {
public:
    bool solve(string &s, string &goal){
        if(s.size() > goal.size()) return false;
        if(s.size() < goal.size()) return false;
        s+=s;
        if(s.find(goal) < s.size()) return true;
    }
};
```

The test case shows s = "abcde" and goal = "cdeab".

(ii)

```
class Solution {
public:
    vector<bool> camelMatch(vector<string>& queries, string pattern) {
        vector<bool> ans;

        for (const string& q : queries)
            ans.push_back(isMatch(q, pattern));

        return ans;
    }
private:
    bool isMatch(const string& q, const string& pattern) {
        int j = 0;

        for (int i = 0; i < q.length(); ++i)
            if (j < pattern.length() && q[i] == pattern[j])
                ++j;
            else if (isupper(q[i]))
                return false;

        return j == pattern.length();
    }
};
```



## Output:-

The screenshot displays a coding platform interface for a C++ submission. The submission is titled "Accepted" and was submitted by "avinash\_vermaa" on Feb 06, 2024 at 10:46. The submission details show a runtime of 0 ms and memory usage of 8.42 MB, both of which beat 100.00% and 33.79% of users with C++ respectively. A bar chart shows the submission's performance relative to others. The code is written in C++ and implements a function to check if a string is a subsequence of another string. The test case shows the input string "FooBar" and the pattern "FB".

**Runtime:** 0 ms  
Beats 100.00% of users with C++

**Memory:** 8.42 MB  
Beats 33.79% of users with C++

**Code:**

```
class Solution {
public:
    bool isSubsequence(string s, string t) {
        int j = 0;
        for (int i = 0; i < s.length(); i++) {
            if (j < t.length() && s[i] == t[j])
                j++;
            else if (i == s.length() - 1)
                return false;
        }
        return j == t.length();
    }
};
```

**Testcase:**

Case 1: queries = ["FooBar", "FooBarTest", "FootBall", "FrameBuffer", "ForceFeedBack"], pattern = "FB"