CHANDIGARH UNIVERSITY
Discover. Learn. Empower.

UNIVERSITY INSTITUTE OF ENGINEERING

Department of Computer Science & Engineering

Subject Name: Competitive Coding 2

Subject Code: 20CSP-351

Submitted to:

Faculty name: Mr. Ankesh Gupta

Submitted by:

Name: Sahil Kaundal

UID: 21BCS8197

Section: 616

Group: A

INDEX

Ex. No	List of Experiments	Conduct (MM: 12)	Viva (MM: 10)	Record (MM: 8)	Total (MM: 30)	Remarks/Signature
1.	Arrays, Stacks, Queues linked list					
2.	String Matching					
3.						
4.						
5.						
6.						
7.						
8.						
9.						
10.						

Experiment 2.1

Student Name: Sahil Kaundal
UID: 21BCS8197
Branch: BE CSE (Lateral Entry)
Section/Group: 616/A
Semester: 6th
Date of Performance: 22/02/2023
Subject Name: CC-2 Lab
Subject Code: 20CSP-351

1. **Aim/Overview of the practical:**

Repeated String Match

Given two strings a and b, return *the minimum number of times you should repeat string* a *so that string* b *is a substring of it*. If it is impossible for b to be a substring of a after repeating it, return -1
https://leetcode.com/problems/repeated-string-match/

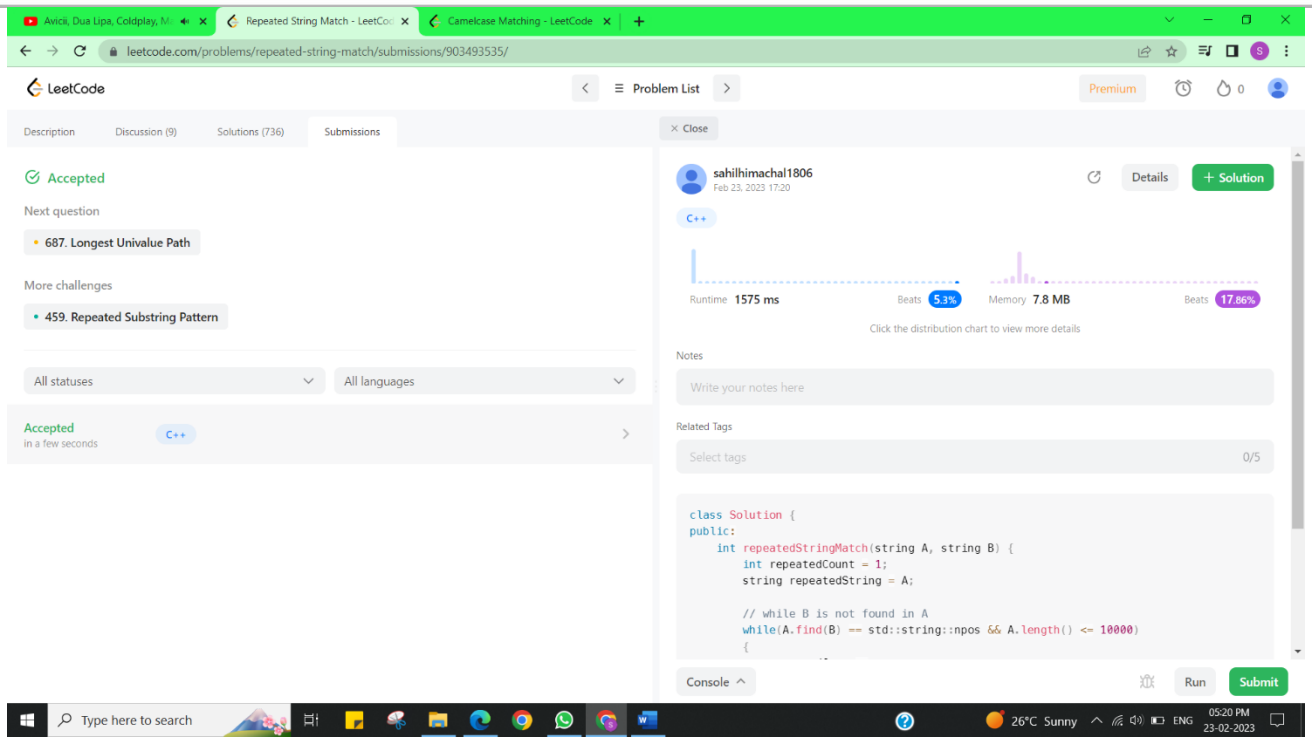
2. **Apparatus / Simulator Used:**
   - Windows 7 or above
   - Google Chrome

3. **Code:**

```
class Solution {
public:
   int repeatedStringMatch(string A, string B) {
      int repeatedCount = 1;
      string repeatedString = A;
      while(A.find(B) == std::string::npos && A.length() <= 10000)
      {
         repeatedCount++;
         A += repeatedString;
      }

      return (A.length() > 10000) ? -1 : (repeatedCount);
   }
};
```

4. **Result/Output/Writing Summary:**



Experiment 2.2

1. **Aim/Overview of the practical:**

   Camelcase Matching

   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.

   https://leetcode.com/problems/camelcase-matching/

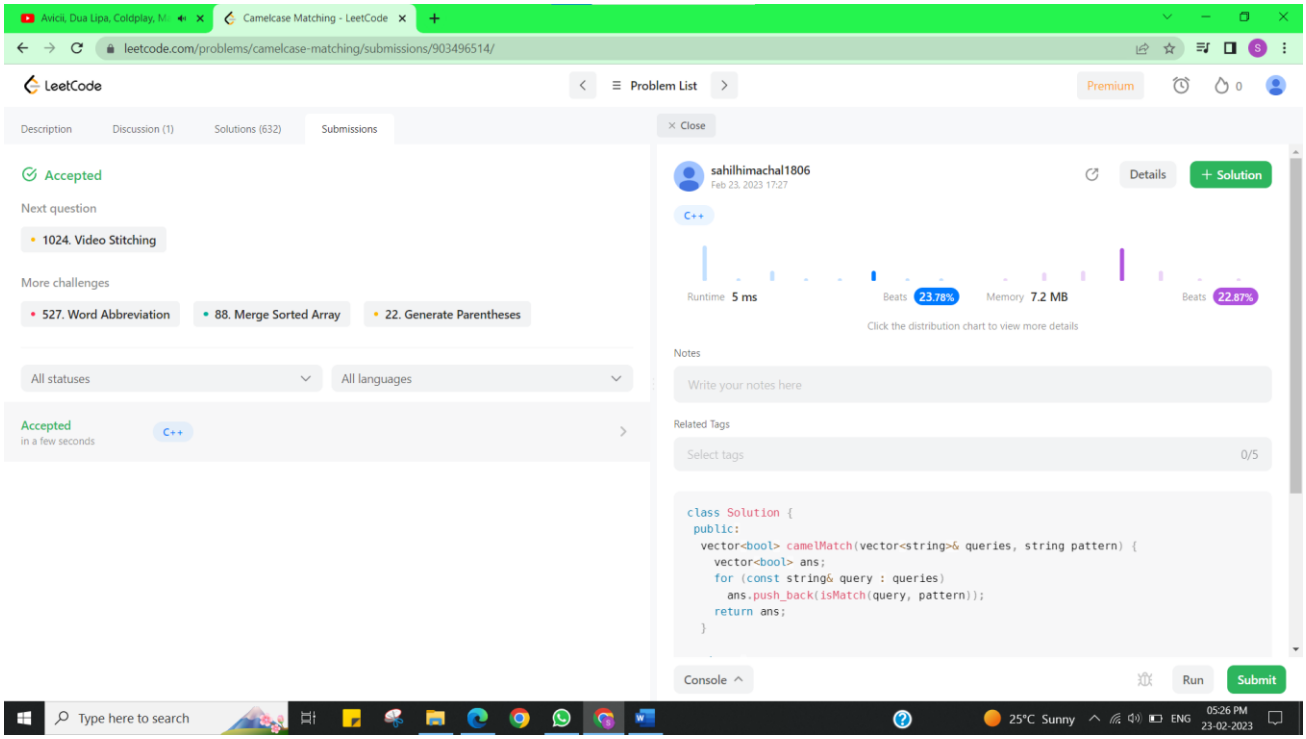
2. **Apparatus / Simulator Used:**
   - Windows 7 or above
   - Google Chrome

3. **Code:**

```
class Solution {
 public:
  vector<bool> camelMatch(vector<string>& queries, string pattern) {
    vector<bool> ans;
    for (const string& query : queries)
      ans.push_back(isMatch(query, pattern));
    return ans;
  }
```

```
 private:
  bool isMatch(const string& query, const string& pattern) {
    int j = 0;
    for (const char c : query)
      if (j < pattern.length() && c == pattern[j])
        ++j;
      else if (isupper(c))
        return false;
    return j == pattern.length();
  }
};
```

4. Result/Output/Writing Summary:



Learning outcomes (What I have learnt):

- Learned the concept of Repeated string match.
- Learnt about Camelcase Matching.

Evaluation Grid (To be created as per the SOP and Assessment guidelines by the faculty):

Sr. No.	Parameters	Marks Obtained	Maximum Marks
1.			