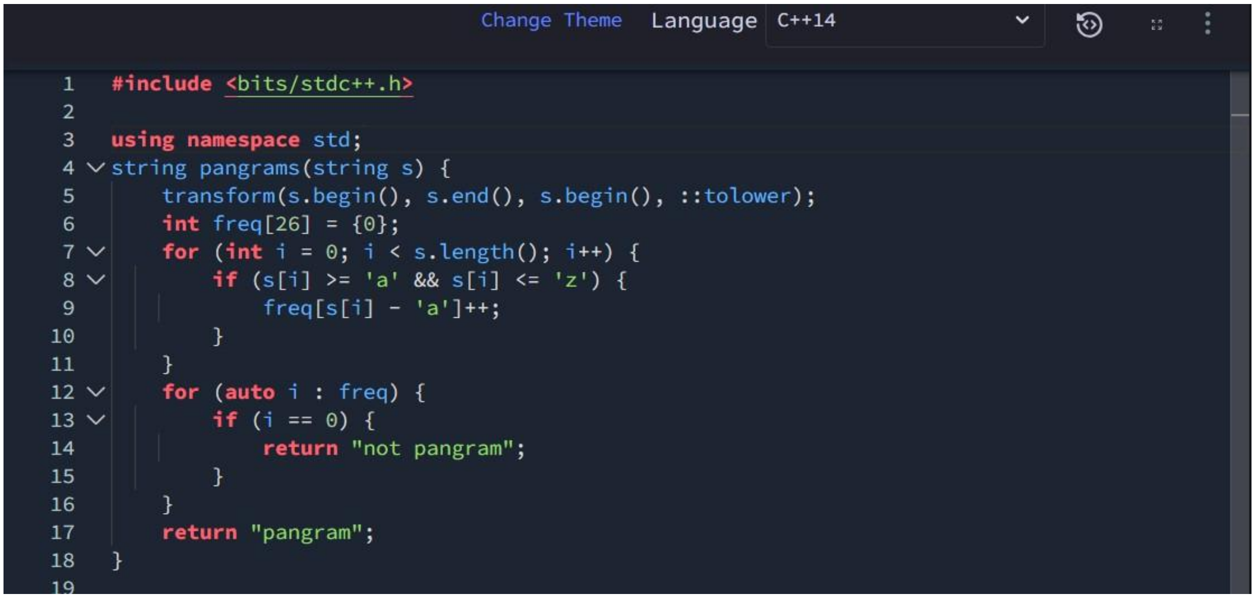
Experiment2.1

Student Name: Virat Samdarshi **UID: 22BCS12648**
Branch: B.E(CSE) **Section/Group: IOT_627-B**
Semester: Fifth **Date of Performance: 12/09/24**
Subject Name: AP LAB 1 **Subject Code: 22CSP-314**

1. **Aim:** A pangram is a string that contains every letter of the alphabet. Given a sentence determine whether it is a pangram in the English alphabet. Ignore case. Return either pangram or not pangram as appropriate.
2. **Objective:** Determine if a sentence contains every letter of the English alphabet. Return "pangram" or "not pangram.

3. **Implementation/Code :-**

```
string pangrams(string s) {
    transform(s.begin(), s.end(), s.begin(), ::tolower);
    int freq[26] = {0};
    for (int i = 0; i < s.length(); i++) {
        if (s[i] >= 'a' && s[i] <= 'z') {
            freq[s[i] - 'a']++;
        }
    }
    for (auto i : freq) {
        if (i == 0) {
            return "not pangram";
        }
    }
    return "pangram";
}
```

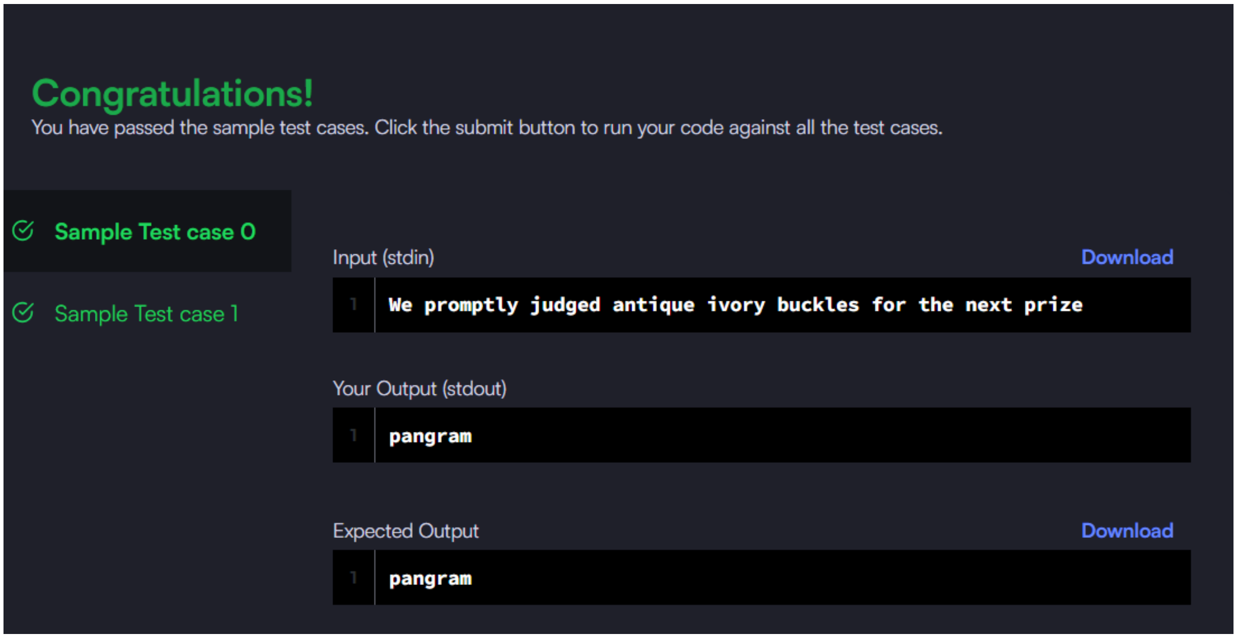


Language C++14

```cpp
#include <bits/stdc++.h>

using namespace std;
string pangrams(string s) {
    transform(s.begin(), s.end(), s.begin(), ::tolower);
    int freq[26] = {0};
    for (int i = 0; i < s.length(); i++) {
        if (s[i] >= 'a' && s[i] <= 'z') {
            freq[s[i] - 'a']++;
        }
    }
    for (auto i : freq) {
        if (i == 0) {
            return "not pangram";
        }
    }
    return "pangram";
}
```

4. Output :-



Congratulations!

You have passed the sample test cases. Click the submit button to run your code against all the test cases.

Input (stdin)

```
We promptly judged antique ivory buckles for the next prize
```

Your Output (stdout)

```
pangram
```

Expected Output

```
pangram
```

5.Time Complexity: O(n)

PROBLEM 2

1. Aim: There is a sequence of words in CamelCase as a string of letters,

having the following properties:

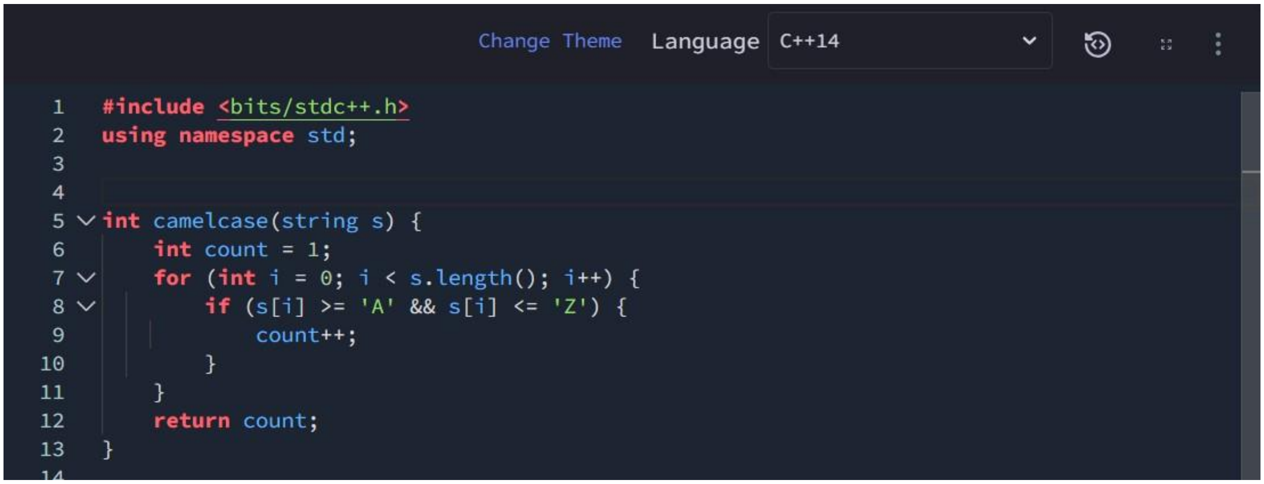
- It is a concatenation of one or more words consisting of English letters.
- All letters in the first word are lowercase.
- For each of the subsequent words, the first letter is uppercase and rest of the letters are lowercase.

Given s, determine the number of words in s .

2.Objective: The objective is to determine the number of words in a CamelCase string by counting the occurrences of uppercase letters, which indicate the start of new words, and including the first lowercase word.

3.Implementation/Code :-

```
int camelcase(string s) {
    int count = 1;
    for (int i = 0; i < s.length(); i++) {
        if (s[i] >= 'A' && s[i] <= 'Z') {
            count++;
        }
    }
    return count;
}
```

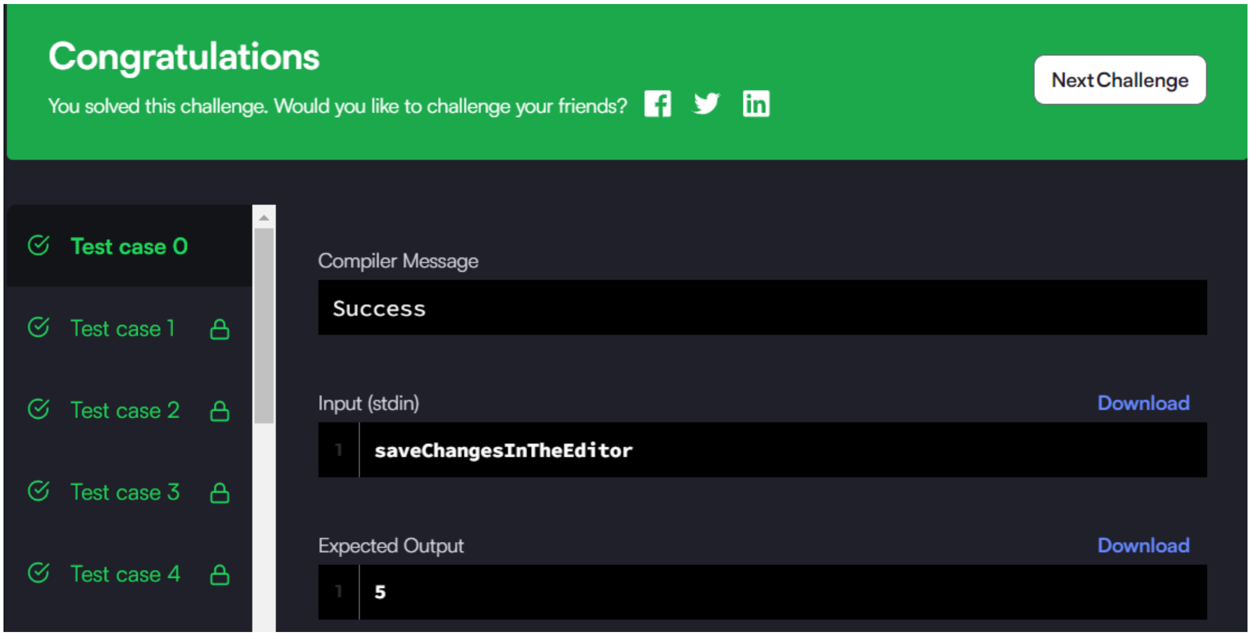


Language C++14

```cpp
#include <bits/stdc++.h>
using namespace std;


int camelcase(string s) {
    int count = 1;
    for (int i = 0; i < s.length(); i++) {
        if (s[i] >= 'A' && s[i] <= 'Z') {
            count++;
        }
    }
    return count;
}
```

4.Output :-


Congratulations

You solved this challenge. Would you like to challenge your friends?

Compiler Message

```
Success
```

Input (stdin)

```
saveChangesInTheEditor
```

Expected Output

```
5
```

5.Time Complexity: O(n)