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**NPTEL (<https://swayam.gov.in/explorer?ncCode=NPTEL>) » Programming in Modern C++ (course)**


## Course outline

How does an NPTEL online course work? ()

Week 0 ()

Week 1 ()

Week 2 ()

Week 3 ()

Week 4 ()

Week 5 ()

Week 6 ()

Week 7 ()

Week 8 ()

Week 9 ()

○ Lecture 41 :  
Input-Output:  
File Handling

## W9\_Programming\_Qs-3

**Due on 2023-03-30, 23:59 IST**

Consider the following program (in C++11), which finds the frequency of each vowel in a given string. Fill in the blanks as per the instructions given below:

- Fill in the blank at LINE-1 with an appropriate statement to iterate over the given string str.
- Fill in the blank at LINE-2 with conditional statement to extract the vowels.
- Fill in the blank at LINE-3 with an appropriate statement to iterate over the given map vFreq, and print it.

The program must satisfy the sample input and output.

Your last recorded submission was on 2023-03-25, 21:14 IST

Select the Language for this assignment. C++ ▼

```

1 #include <iostream>
2 #include <map>
3 #include <string>
4
5 std::map<char, int> findVowelFrequency(std::string str){
6     std::map<char, int> vFreq;
7
8     for (auto it = str.begin(); it != str.end(); ++it) //LINE-1
9         if(*it=='a' || *it=='e' || *it=='e' || *it=='i' || *it=='o' ||
10            vFreq[*it]++;
11     return vFreq;
12 }
13 void print(std::map<char, int> vFreq){
14     for (auto it= vFreq.begin(); it !=vFreq.end(); ++it)
```



in C (unit?  
unit=102&lesson=103)

Lecture 42 :  
Input-Output:  
Streams in  
C++ (unit?  
unit=102&lesson=104)

```
0 std::cout << it->first << " -> " << it->second << std::endl;
1 }
2
3 int main() {
4     std::string s;
5     std::cin >> s;
6     std::map<char, int> vFreq = findVowelFrequency(s);
7     print(vFreq);
8     return 0;
9 }
```

Lecture 43 :  
C++ Standard  
Library: Part 1  
(Generic  
Programming)  
(unit?  
unit=102&lesson=105)

You may submit any number of times before the due date. The final submission will be considered for grading.

**This assignment has Public Test cases. Please click on "Compile & Run" button to see the status of Public test cases. Assignment will be evaluated only after submitting using Submit button below. If you only save as or compile and run the Program , your assignment will not be graded and you will not see your score after the deadline.**

Lecture 44 :  
C++ Standard  
Library: Part 2  
(STL) (unit?  
unit=102&lesson=106)

**Save as Draft**

## Compile & Run

Submit

## Reset

Lecture 45 :  
C++ Standard  
Library: Part 3  
(STL) (unit?  
unit=102&lesson=107)

### Private Test cases used for Evaluation

## Status

## Test Case 1

**Passed**

Tutorial 09 :  
 How to design  
 a UDT like  
 built-in types?:  
 Part 3:  
 Updates and  
 Mixes of UDTs  
 (unit?  
 unit=102&lesson=108)

Week 9  
Lecture  
Material (unit?  
unit=102&lesson=109)

- Quiz: Week 9 : Assignment 9 (assessment? name=202)

W9\_Programming\_Qs-1  
(/noc23\_cs50/progassignment?name=204)

W9\_Programming\_Qs-  
2  
(/noc23\_cs50/progassignment?  
name=205)



● **W9\_Programming\_Qs-3**  
**(/noc23\_cs50/progassignment?name=207)**

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Solving  
Session ()**

