CSE-165-Lab 13

100 Points

Write a separate .cpp file for each of the following tasks. For each question try to come up with various test cases to test your code. You may be evaluated based on test cases provided during demo.

1. Dynamic Arrays(30 Points)

In the dynArray.cpp file, a template class DynArray is needed for it to correctly compile and display the given output when executed. Provide its implementation in a header file DynArray.h

Sample output from dynArray.cpp
2 1.0806 -0.832294 -1.97998 -1.30729
2 1 0 -1 -1

2. Iterators(30 points)

This exercise demonstrates the concept of an iterator. Extend your DynArray class of the previous exercise such that the iterators.cpp file works correctly.

Sample output from iterators.cpp
0 : 2
1 : 1
2 : 0
3 : -1
0 : 2
1 : 1.0806
2 : -0.832294
3 : -1.97998

3. STL Map (40 Points)

Given a text file **file.txt**, print all the words with their corresponding count. You need to use **STL's unordered_map** and simplemap.cpp file to achieve this task.

Sample output:
(Software, 1), (It, 1), (general-purpose, 1), (on, 1), (it, 1), (including, 1), (for, 1), (C++, 3), (is, 3), (by, 1), (a, 2), (compiled, 1),

CSE-165-Lab 13

(programming, 2), (Classes"., 1), (Bjarne, 1), (Free, 1), (compilers,, 1), (language, 2), (object-oriented,, 1), (created, 1), ("C, 1), (Stroustrup, 1), (as, 2), (and, 4), (provide, 1), (an, 1), (low-level, 1), (extension, 1), (of, 1), (the, 2), (C, 1), (language,, 2), (or, 1), (addition, 1), (with, 1), (functional, 1), (The, 1), (has, 2), (Foundation,, 1), (expanded, 1), (significantly, 1), (over, 1), (available, 1), (time,, 1), (modern, 1), (features, 1), (implemented, 1), (now, 1), (many, 2), (generic,, 1), (in, 1), (always, 1), (to, 1), (facilities, 1), (memory, 1), (manipulation., 1), (almost, 1), (LLVM,, 1), (vendors, 1), (Microsoft,, 1), (Oracle,, 1), (Intel,, 1), (IBM,, 1), (so, 1), (platforms, 1),

Instruction for submission:

1. Create folder for each solution and Zip all your folder together
2. Submit the zip folder to catcourse