
CS221 – Lab26

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INTRODUCTION

Today's lab gives you practice programming advanced data structures in C++. Unlike in Java, you must write the code to `delete` memory when you are done using your data structures. But you have to be careful not to use a pointer after it has been `delete'd`.

This lab has some nontrivial string processing also.

This week's lab

The description is easy, though the code may not be. Please write a program **sortlist.cpp** that reads words from the keyboard and puts the words into a linked list in alphabetical order. Continue adding words to the linked list until the keyboard input ends.

- Convert all words to lowercase before inserting into the linked list.
- Ignore (skip over) all punctuation and numerical digits.
- When adding a word, if the word already is in the list, do not add it a second time.
- After the keyboard input ends, print out all the words in the list, in order.
- Before exiting the program, free all memory you allocated.

CONCLUSION:

Please push the program to GitHub before the lab deadline.

- You must push to GitHub by the end of class, or you will receive no credit for this lab.

Task	Score, points
Makefile successfully builds sortlist	5
sortlist.cpp gives correct results with 5 test cases	15
Software and design quality of your software library, as judged subjectively by the grader	10