COMP1511 PROGRAMMING FUNDAMENTALS

LECTURE 17

Exam-Style Questions

Ask me Anything

LAST WEEK...

- Exam Information
- A few exam style questions

TODAY...

- Exam Style Questions
- Q&A with the tutors - ask me anything

WHERE IS THE CODE?

Live lecture code can be found here:

HTTPS://CGI.CSE.UNSW.EDU.AU/~CS1511/25T1/CODE/WEEK_10/

COURSE FEEDBACK

my Experience surveys

http://myexperience.unsw.edu.au/

EXAMPLE PROBLEM

Problem 1: Find the range (the difference between the biggest term and the smallest term) of a linked list

EXAMPLE PROBLEM

Problem 2: Concatenate two linked lists (join one linked list to another)

EXAMPLE PROBLEM

Problem 3: Given two linked lists, return the difference in the number of items in the two lists.

EXAMPLE PROBLEM

Problem 4: Count all the elements in the linked list that are divisible by a given number and output the count.

EXAMPLE PROBLEM

Problem 5: Given two linked lists, count the number of even numbers in both linked lists and return the difference.

EXAMPLE PROBLEM

Problem 6: Insert a specified number into an ordered linked list, to retain the order of numbers.

EXAMPLE PROBLEM

Problem 7: Delete the first node in the list that is divisible by 6

EXAMPLE PROBLEM

Problem 8: Duplicate every node in the list by inserting the same node after the original node.

EXAMPLE PROBLEM

Problem 9: Find the smallest element in the linked list and return it's position in the list.

EXAMPLE PROBLEM

Problem 10: One that we make up ourselves :)

EXAMPLE PROBLEM

Problem 11: In this task, you are given an array of integers with exactly size elements, and a target number.
Your function closest_to_target should return the sum of any two numbers in the array that is closest to the target number.

EXAMPLE PROBLEM

Problem 12: Read integers until a negative integer is read and then print odd and even integers on separate lines

EXAMPLE PROBLEM

Problem 13: Read integers into an array from terminal until a number is entered, which when multiplied by at least one other number previously entered results in 56.

EXAMPLE PROBLEM

Problem 13: The function sum_cont_subarray should return the largest contiguous sum of a subarray in a given array

EXAMPLE PROBLEM

Problem 14: An isogram is a word in which no letter of the alphabet occurs more than once. Write a C program that reads in words until Ctrl+D and checks whether the word is an isogram.

EXAMPLE PROBLEM

Problem 15: Write a C program that reads in words until Ctrl+D, and checks whether a word read in as a command line argument appears in the main word. If it appears, print it again.

Q&A WITH THE TUTORS

ASK ME (ALMOST) ANYTHING

- Your chance to hear from our tutors about:
  - Exam tips
  - What to enrol in next term
  - Getting internships/job
  - Being a tutor

Thank you all so much for tuning in, for learning, for engaging, and I hope that you had an enjoyable intro to programming. Don't forget that Rome wasn't built in a day, and becoming a better programmer entails lots of practice!

I really appreciate the engagement that you have shown throughout the lectures, and I wish you all well in the final exam.

Have a wonderful *short* break, I hope you all get some proper down time.

Good Luck in the exam and for your future courses, and I may see some of you again in your later courses :)

WHAT DID WE LEARN TODAY?

REVISION

Linked Lists

problem1.c
problem2.c
problem3.c
problem4.c
problem5.c
problem6.c
problem7.c
problem8.c
problem9.c

REVISION

Arrays

problem11.c
problem12.c
problem13.c

REACH OUT

CONTENT RELATED QUESTIONS

Check out the forum

ADMIN QUESTIONS

cs1511@unsw.edu.au