COMP1511/1911 Programming Fundamentals

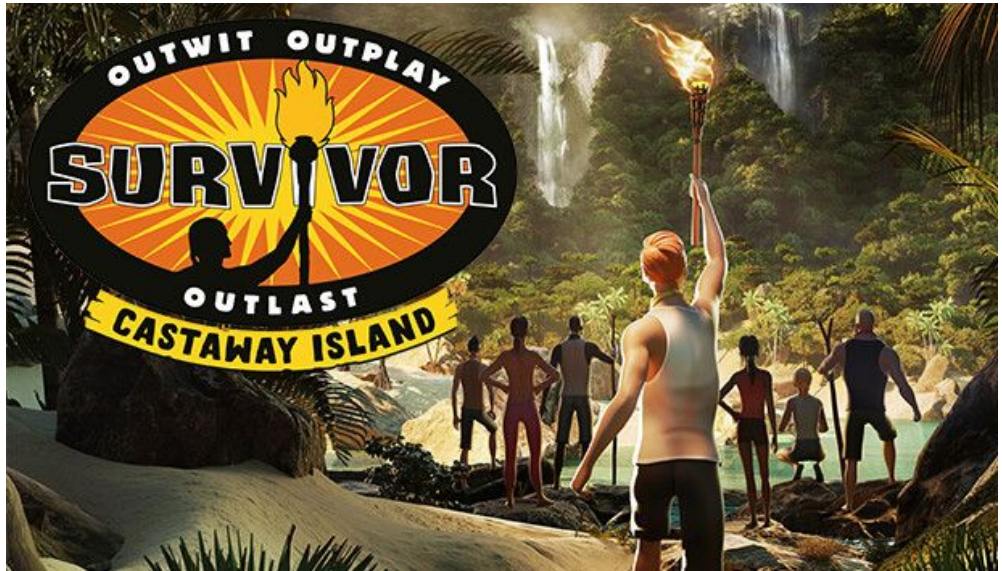
Week 10
Lecture 1

myExperience

- Please fill out myExperience
  - Please
- http://myexperience.unsw.edu.au/

Incentives

- If we get >70% myExperience I will livestream...



Prac Exam

- Online students sign up for a in-person TLB for week 10 practice final exam
  - If you’re in an online tut
    - Still go to it
    - Sign up for an in-person one
      - Gain experience in the exam environment!
- Sign up here: https://buytickets.at/comp1511unsw/2330803

Week 10 and 11 Drop In Sessions

- You can book a 30 minute time slot with a tutor for one on one help if you need assistance!
  - We are opening more!
  - https://buytickets.at/comp1511unsw/2330281

Revision Sessions

- Week 11 revision sessions will help go over the course content in preparation for final exam
  - We also are opening more!
  - https://buytickets.at/comp1511unsw/2325770

Assignment 2

- Assignment 2 is out
  - Please do it
  - Also please take care of yourself

Previously On...

- Exam info
  - Information about the exam
  - Please read it
- Exam revision
  - Revision about the exam
  - Please revise it

Today

- Just a bunch of programming problems
  - Like 15 of them
- It’ll be fun!
- The sample answers will not be uploaded
  - You should practice these problems as well!
    - If you get stuck, you can watch the lecture maybe? 👀

Problem 1

- Find the range in a linked list
  - The range is the difference between the largest value in the linked list and the smallest value in the linked list

Problem 2

- Concatenate two linked lists
  - Attach one linked list to the end of another linked list

Problem 3

- Find the difference in length between two linked lists

Problem 4

- Find the number of items in the linked list that are divisible by 6

Problem 5

- Given two linked lists, count the number of even numbers in each, and return the difference

Problem 6

- Given a linked list, return the position of the smallest item in the linked list
  - (The index of it if it were an array)

Problem 7

- Given a linked list, delete all the nodes that are divisible by 6

Problem 8

- Duplicate every node in a linked list
  - If this list is 3->4->5->NULL it becomes 3->3->4->4->5->5->NULL

Problem 9

- Sum every node in a linked list and add that sum to the end as a new node

Problem 10

- After every two nodes, insert the sum of the previous two nodes
  - 3->4->5->6->NULL becomes 3->4->7->5->6->11->NULL

Problem 11

- Given an array, return the sum of two elements in the array that are closest to the target value

Problem 12

- Read integers into an array until a number is entered that when multiplied by a previously entered number, results in 56

Problem 13

- Find the sum of the longest contiguous subarray within in array

Problem 14

- Check if a word is an isogram
  - Every letter in the word appears only once

Problem 15

- Read in words one at a time, and print the word again if that word appears in the command line arguments anywhere

Thank you!

Questions?