CSDS 233 Spring Session 4

SI Leader: Jakob Danninger

2/7/2023

Disclosure: This is a supplement to class, not a replacement. This should not be your only study activity for exams, it should aid you in studying. I do not have the actual exam so questions here will differ from those on the exam.

Session Objectives:

- 1) Be able to create methods to traverse linked lists and modify data using getNext() and hasNext()
- 2) Understand the between .next and getNext() and hasNext()

Since last time this fell apart and e

1) What are the fundamental difference between node.next, node.head, node.data as difference compared to node.getNext(), node.getHead(), node.getData()

2) What are the advantages of using node.next, node.head, node.data?

3) What are the advantages of using node.getNext(), node.getHead(), node.getData()?

4) What does next() and hasNext() do inside an Iterator? What is their function?

Remind me to rant about git before we start this. . .I am thinking about instead of replit I could give you a git repository but I want to know if that's too advanced or not. . . it would be good practice for real world SWE

Coding time: https://github.com/jdanninger/CSDS233-Supplemental-Instruction

→ Code under Session 4 folder

This is all about coding linked list stuff using iterators . . . you will need to create the following methods (which I already made the outline of):

- numOccur is the number of occurrences, so if you have LL (1,2,3,1,2,2) and you have the number 2, return 3 since the integer 2 has 3 occurrences in the LL
- length literally return the technical length of the LL
- convertToArray take a given input and turn it into an array