

## CSDS 233 Spring Session 4

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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. . . it's a bread and butter piece of software which you will be forced to use as a comp sci person.

**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