

Lesson - Week 5:

Course Objectives Alignment:

<< * The Course Objectives (CO##) are listed in the Course Outline *>>

- CO02 - You are encouraged to review/edit sample programming code (within the chapters) in a file creation and editing simulation environment called TutorialPoint and/or the NetBeans IDE. You will continue to code a Programming Assignment.
- CO03 - You will continue to work with NetBeans to finish up your Programming Assignment.
- CO04 - Chapter 11 is about Recursion – making code modular so it can be called recursively.
- CO05 - We learn about Recursion in the chapter.
- CO06 - We will be finishing up our first programming project this week.
- CO07 - Key terms are found in the chapter.

Read in Your Textbooks:

- Chapter 11

This chapter is about Recursion which is breaking a larger problem into the same, smaller, specific sub-tasks but in the lowest level the tasks are fully described. The authors use the example of "Mow the lawn" as an example of a recursive process where the problem is broken down into smaller mowing sections until the last section referenced actually describes the mowing process that is repeated. The authors leave the process of applying the actual mowing steps to the referenced sections. When we implement recursion in Java, Java takes care of applying the finite steps to the repeated sections. Recursion allows us to reduce the code needed to accomplish a lot of repetitive tasks.

Things to Look Out For:

- Keep the example of mowing a lawn in mind when reading the other sections of the chapter because many students struggle trying to comprehend how one set of finite instructions equate to the solution of the bigger problem.
- Try running the examples in the book so you see how the repeated calls to the same method perform the recursive work.
- Definitions to key terms are found in the chapter.

Discussion Questions:

Muddiest Points Forum - Post to this forum as often as you need to when you run into trouble understanding a concept, something in the book, or just have a question. You may assist your classmates by answering. Emailing me is the fastest way to get a

response from your instructor but your classmates may be able to offer you help when they are in the course. If your questions are of a personal nature, please email me instead of using this forum.

zyBooks Participation Assignment:

Complete the Participation Assignment for Week 05 – Chapter 11 in your zyBooks Textbook due 10/15.

Project from Week 4 (Due 10/1):

You should be finishing up your first project and submit it to the Dropbox by 11:59PM on 10/1.