**Instructions**: You must read the material and create an outline of the topics in your OWN words.  Do not copy the text from the tutorials into your notes. Make sure your outline contains notes for each subsection of the reading assignment. Thoroughly cover each topic to show you have a firm understanding of the programming concept or construct.

| **Ques** | **NOTES:** |
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| Java Packages  Java Arrays  Java ArrayList  Arraylist.contains() in Java  ArrayList subList() method in Java | This is a kind of folder or directory that contains or group java classes in order to avoid name conflicts and they also help make code more maintainable. This is further subdivided into two categories;   1. Built-in packages: such as java, lang,net, util,and more are pre-written and provided by java platform in the development area. They provide necessary components for managing database programming, inputs and more. 2. User-defined packages: Each user is at liberty and can create owned packages using syntax “package” in the command to group owned interfaces.   This is a data structure capable of storing a collection of elements of the same type. Each element in an array is unique, and it’s index begins with a zero “0” followed by one “1” and so on. This can be created by first declaring the data or variable type followed by a “[ ]” , followed by the decided array name followed by an “=” then followed by the values in a curly bracket “{ }”. Multiple values can be separated with a comma in-between.  As compared to “ARRAYS” which are non-modifiable once created, this is a modifiable or resizable class array originally stored in the the java.util package. It can be created by using the “import java.util,ArrayList; ArrayList<String> (arrayname) = new ArrayList<String>();” The different commands used in manipulating data in an ArrayList; **a. set()** - used with the index number to modify or change an element. **b. remove()** - used with an index number to remove a specific element from the list.  **c. clear()** - deletes all elements in the arraylist. **d. size()** - lists out all elements present in the arraylist.  This commandlet is useful in checking for the existence of specified elements available in a list or not. The syntax is written in a way that it returns a true if the element is available and a false if if it doesn’t. E.g public boolean contains(object pumpkin), where pumpkin is the element we are checking for.  This method returns a portion of the arraylist based on the specification given “fromIndex toIndex” with the data type prefacing it. E.g “List<string or int> mylist4 = mylist.sublist(8, 24);” |
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