**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 Methods (programiz)  Methods in Java (GeeksforGeeks) | A block of code designed for specific assigned tasks which helps in organizing and structuring java codes in order to provide ability to maintain and reuse of codes. The method have two types;   1. User-Defined Method: This is created or written by the programmer or user, first declaring the method name, then return value type and the associated parameters. This method can be call from anywhere in the program once it has been declared.   int sum = add(31, 11); is an example of user-defined method.   1. Standard Library Method: This is a wider collection of interfaces and classes made available by java providing wider functionality which includes; input & output, data structures, mathematical operations, networking and manipulation of strings. It houses several packages like java.io, java.util, java.net and more, which each in turn contains related interfaces and classes. *System.out.println()* is an example of a standard library method.   Also seen as a function that exposes objects behavior.  A method has 6 declaration components;   * Modifier (e.g public, default); keywords used in changing a class behaviour to control visibility. * Return type (e.g int, varchar); It enforces type safety and indicates the purpose of a method * Method name (e.g printHello()); This is a unique identifier referring to the method, created with respect to specific rules. * Parameters(public int mult(int a, int b) { return a \* b;}); It is used to pass data into or receive data from the method. * Exceptions (though optional); Event that disrupts programs normal flow of events, it can be checked or unchecked. * Method body; This contains expressions statements and other code blocks enclosed in braces { }.   It’s syntax, or defining rules of code writing is ;  <access\_modifier> <return\_type> <method\_name> (list of parameters)  { //body  } |
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