**Chapter 4 to 7**

1. Infinite Loop → A loop statement that executes infinitely
2. Nested Loop → Consists of an outer loop and one or more inner loops
3. Stub → A simple, incomplete version of a method
4. Pass-By-Value → The value of the argument passed to the parameter when a method is invoked with an argument
5. Scope of a Variable → The part of the program where the variable is accessible
6. Do-While Loop → similar to while loop; executes  
   the loop body first and then checks the loop-continuation-condition to  
   decide whether to continue or to terminate
7. Post-Test Loop → Do-While Loop; the condition is checked after the loop body is executed
8. Ambiguous Invocation → When there are two or more possible matches for the invocation of a method, but the compiler is unable to determine the best match
9. Loop Body → The part of the loop that contains the statements to be repeated
10. Instance Method → Only can be invoked from a specific string instance
11. Formal Parameter/Parameter → The variable used in a method to stand for the value that is passed into the method by a caller
12. Actual Parameter/Argument → The actual value that is passed into the method by a caller
13. Escape Character → \ (the backslash)
14. Continue Statement → Only ends a current iteration
15. String → A predefined class in the Java library, not a primitive type, a reference type, also an object
16. Loop → Controls how many times an operation or sequence of operations performed in succession
17. Array Initializer → combines the declaration, creation, and initialization of an array in one statement
18. Index → A numeric association to an element in a collection of data; the position of an object in an array
19. Char type → A character data type used to represent a single character
20. Searching → The process of looking for a specific element in an array
21. While Loop → Checks the loop-continuation-condition first. If the condition  
    is , its body is executed; if it is , it terminates
22. Divide-and-Conquer / Stepwise Refinement → A technique of writing software where you gradually add error checking and functionality
23. Garbage Collection → An automatic memory management feature that is collected by the Java Virtual Machine
24. Array → Stores a fixed-size sequential collection of elements in the same type
25. Escape Sequence → \\ (two backslashes)
26. Sentinel Value →  A special value that signifies the end of the loop
27. Modifier → Keywords such as public, static, and final
28. Encoding Scheme → How characters are encoded
29. Input Redirection → The program takes the input from the file Input.TXT rather than having the user type the data from the keyword at runtime
30. Method Abstraction → Separating the use of a method from its implementation
31. Pre-Test Loop → While & For Loops; the continuation condition is checked before the loop body is executed
32. Output Redirection → Sends the output to a file rather than displaying it on the console
33. Iteration → A one-time execution of a loop body
34. Method Signature → The method name and the parameter list
35. Method Overloading → When there are two methods have the same name but different parameter lists within one class
36. Off-by-One Error (Loops) → Executing a loop one more/less time accidentally
37. Off-by-One Error (Arrays) → When one references the first element in an array with index [ 1 ], but it should be [ 0 ]
38. Static Method → A non-instant method that can be invoked without using an object
39. Break Statement → Immediately ends the innermost loop
40. Information Hiding/Encapsulation → Using a method without knowing how it is implemented
41. Anonymous Array → When there is no explicit reference variable for an array
42. Format Specifier → Specifies how an item should be displayed, which may be a numeric value, character, Boolean value, or string. Begins with %
43. Indexed Variable → the variable inside the brackets, [ ]
44. Method → A group of statements to perform a specific task
45. Encoding → Mapping a character to its binary representation
46. For Loop → Used to execute a loop body a fixed number of times; has three parts: initial action that initializes a control variable, the loop-continuation-condition, and execution after each iteration and is often used to adjust the control variable