

Topics for Final Review

Java Language Fundamentals

Increment and Decrement Operators

Differences between prefix and postfix forms of increment and decrement operators

break and **continue** statements

Where can you use both statements?

Where can you use **break**, but not **continue**?

File Input and Output

Classes involved in file I/O operations (java.io.File, java.util.Scanner, java.io.PrintWriter, java.io.FileWriter)

Exceptions

What are exceptions?

Why do you get exception messages when compiling programs that perform file I/O?

How do you deal with file I/O exceptions?

Classes in java.lang, java.util, and java.io packages

Random

File

PrintWriter

Scanner

String

Methods

Passing arguments

Method Signature

Returning values (**return** statement)

Method overloading

Object Oriented Programming Concepts

Encapsulation

Data Hiding

Classes and Objects

Fields and methods

Instance fields and methods

Class-level (**static**) fields and methods

Constructors

Accessors and mutators (setters and getters)

Method overloading

Control structures

Conditional Statements

If-else

Switch-case-default

Loop Statements

For

While

Do-while

Casting (between primitive types), parse methods

Java API – Common packages, classes, and interfaces, online html documentation