

CS/IS-112 – Introduction to Programming Using Java

Topics for Midterm Review

Exam Format:

Part 1: 30 multiple choice questions (duration: 1 hour)

Part 2: 1 programming assignment (duration: 1 hour)

Textbook Chapters

Chapters 1 – 4 (up to and including page 229)

Java Concepts

Java Virtual Machine (JVM)

Java Runtime Environment (JRE)

Java Development Kit (JDK)

Compiling and running a Java program

Java bytecode

Java Language Fundamentals

Keywords

Identifiers

Operators and operands

Constants

Literals

Variables

Expressions

Primitive and reference types

Declaring and using variables

Operators

Expressions, arithmetic and boolean expressions, String expressions

Operator precedence

Comments (three types of comments, single line, multi-line, javadoc style)

Control structures

Conditional Statements

If-else

Switch-case-default

Using **break** keyword in switch-case statements

Loop Statements

For

While

Do-while

Using **break** and **continue** keywords in loops

Using **return** keyword to exit the main method

Casting (between primitive types), parse methods

String class

Scanner class

How to use the Scanner class to capture user input from keyboard

System.exit() method to exit the program

Java 8 API – Common packages, classes, and interfaces

Java 8 API – Documentation