1. Command Line
   1. Organization of a computer system
   2. What is a Command Line Interface?
   3. Why Use a Command Line Interface?
   4. Different Shells
   5. UNIX Commands
   6. The File System
   7. I/O Redirection
   8. Shell Metacharacters
   9. Bash Customization
2. Version Control Systems
   1. What is a Version Control System?
   2. How to Use Git
3. Java Basics
   1. Interpreted vs Compiled Languages
   2. Structure of a Java Program
   3. Statically Typed vs Dynamically Typed
   4. Data Types
   5. Operators
4. Using Classes
   1. Class Basics and Benefits
   2. Creating Objects Using Constructors
   3. Calling Methods
   4. Using Predefined Java Classes
5. Selection
   1. Flow of Control
   2. Logical Expressions
   3. If Statements
   4. Switch Statements
6. Introduction to Methods
   1. Writing Methods
   2. Invoking Methods
7. Loops
   1. While Loops
   2. For Loops
   3. Continue and Break
   4. Scope
8. Arrays
   1. Array Definition
   2. Arrays vs Python Lists
   3. Declaring and Initializing Arrays
   4. Using Arrays
9. Hash Maps
   1. What is a Hash Map
   2. When to Use Hash Maps
10. File Reading
    1. How to Read From a File Using a Scanner
11. Decimal Format
    1. What a Decimal Format Class is Used For
12. Writing Classes
    1. Class vs Object
    2. Defining a Class
    3. Public vs Private
    4. Constructors
    5. this
    6. Overloading
    7. Static Fields and Methods
    8. Packages
    9. The Class Path
13. Hash Tables
    1. What is a Hash Function?
    2. How Do Hash Maps Work?
    3. How to Write a Hash Map
14. Graphs
    1. Definition of a Graph
    2. Directed Graphs
    3. Connected Graphs
15. Class Hierarchy
    1. Subclasses
    2. Overriding Methods
    3. Subclass Constructors
    4. Inheritance Hierarchies
    5. Polymorphism
    6. Casting
    7. Abstract Classes
    8. The Object Class
    9. The Equals Method
    10. Interfaces
16. Drawing Using JavaFX
    1. JavaFX Layout
    2. Threads
17. Event Driven Programming
    1. What is Event Driven Programming?
    2. Inner Classes
18. Program Design
    1. Steps in Developing a Program
    2. What Makes Good Code?
19. Parsing
    1. How Do You Parse Input in Java?
20. Enumerated Constants
    1. Why Would You Use Enumerated Constants?
    2. How Do You Use Them in Java
    3. Enumerated Constants Are Objects
21. Exceptions
    1. Dealing with Errors
    2. The Classification of Exceptions
    3. Declaring Exceptions
    4. How to Throw an Exception
    5. Creating an Exception Class
    6. Catching an Exception
    7. Rethrowing Exceptions
    8. The Finally Clause
    9. Tips for Using Exceptions