Collapse All | ⊕ Export Course Content

Last Export: **Aug 14 at 11:19pm**

▸ **Module 1 : Course Intro, Intro to Programming and The Python Language, Variables, Co...**

[Complete All Items]   ⊖

▾ **Module 2 : Intro to Lists, Loops, and Functions**   [Complete All Items]   ⊖

| 📄 | Module 2 : Intro to Lists, Loops, and Functions
Marked done | ✓ |

1. Module Introduction & Resources

| 📄 | Module 2 Introduction
Mark done | ○ |

| 📄 | Reading: Module 2 Resources
Mark done | ○ |

2. Data Structures: Intro to Lists

| 📄 | Creating a list (0:30)
Mark done | ○ |

| 📄 | Updating a list (1:30)
Mark done | ○ |

3. Flow Control: Loops

| 📄 | Types of Loops (0:17)
Mark done | ○ |

4. 'for' loops

| 📄 | Executing code a given number of times (1:04)
Mark done | ○ |

| 📄 | Iterating over a list (3:31)
Mark done | ○ |

| 📄 | Code Along Exercise : Find minimum value (2:21)
Mark done | ○ |

| 📄 | Iterating over strings (1:34) | |

| 📄 | Iterate over a string (1:09) | |

| 📄 | Code Along Exercise : Iterate over a name (1:48) | |

| 📄 | 'for' loops using range (4:51)
Mark done | ○ |

| 📄 | List comprehension (1:32)
Mark done | ○ |

5. 'while' loops

| 📄 | Repeatedly executing code based on a condition (1:12)
Mark done | ○ |

| 📄 | Waiting for user input (0:45)
Mark done | ○ |

| 📄 | Code Along Exercise : Secret password (1:54)
Mark done | ○ |

| 📄 | Exiting a loop using break (1:09)
Mark done | ○ |

| 📄 | Exiting a loop using continue (1:24)
Mark done | ○ |

| 📄 | Nested loops (1:00)
Mark done | ○ |

| 📄 | Code Along Exercise : Multiplication tables (1:12)
Mark done | ○ |

6. Coding Demonstrations

Coding Demonstration : Average program (4:59)
Mark done

Coding Demonstration : Multiplication table (1:38)
Mark done

Coding Demonstration : Word reversal (1:26)
Mark done

Coding Demonstration : Palindrome (2:23)
Mark done

Quiz 3 - Intro to Lists & Loops
Dec 2 | 10 pts | Submit

7. Functions

What is a function? (0:22)
Mark done

Built-in functions (0:47)
Mark done

User-defined functions (0:56)
Mark done

Code Along Exercise : Square (0:49)
Mark done

Code Along Exercise : Greater than (1:36)
Mark done

Docstrings (Documentation Strings) (0:56)
Mark done

Code Along Exercise : Absolute value (1:20)
Mark done

Calling one function from within another (0:31)
Mark done

Code Along Exercise : Greet user (1:14)
Mark done

Code Along Exercise : Area of rectangle (1:54)
Mark done

Code Along Exercise : Unique list (2:26)
Mark done

Code Along Exercise : Get factors (2:18)
Mark done

8. Variable Scope

Local vs. Global Variables (1:03)
Mark done

Practice Quiz : Intro to Lists, Loops, and Functions
5 pts | Submit

9. Modular Programming

Separating a program into functions (0:37)
Mark done

Program abstraction (0:45)
Mark done

Execution order (0:44)
Mark done

The main function (0:49)
Mark done

Coding Demonstration : Vowel/word counter (9:55)
Mark done

Quiz 4 - Functions and Modular Programming
Dec 2 | 8 pts | Submit

Coding Practice 2 : Number Properties
100 pts | Submit

10. Assessment

📄 **The pass Statement**
Mark done ○

11. Weekly Check In

📄 **Module 2 Check - In**

▼ **Module 3: More with Lists, Strings, Tuples, Sets, and PyCharm**   Complete All Items

📄 **Running code (1:32)**
Mark done ○

📄 **Module 3: More with Lists, Strings, Tuples, Sets, and PyCharm**
Mark done ○

1. Module Introduction & Resources

📄 **Module 3 Introduction (0:55)**
Mark done ○

📄 **Module 3 Resources**
Mark done ○

3. Data Structures: More About Lists

📄 **A review of lists (2:05)**
Mark done ○

📄 **More list operations (0:41)**
Mark done ○

📄 **List functions (0:52)**
Mark done ○

📄 **Assignment by value vs. assignment by reference (1:41)**
Mark done ○

📄 **Copying a list (4:18)**
Mark done ○

📄 **Creating a deep copy of a complex list (2:04)**
Mark done ○

📄 **Call by value vs. call by reference (3:08)**
Mark done ○

📄 **Identity vs. equality (1:05)**
Mark done ○

📄 **Code Along Exercise : Sneaky List (3:27)**
Mark done ○

📄 **Slicing lists (6:29)**
Mark done ○

4. Strings

📄 **Strings vs. lists (0:52)**
Mark done ○

📄 **Slicing strings (1:12)**
Mark done ○

📄 **Code Along Exercise : Name Substring (1:36)**
Mark done ○

📄 **Code Along Exercise : Alphabet Letters (1:14)**
Mark done ○

📄 **String functions**
Mark done ○

📄 **Split and join (1:15)**
Mark done ○

Split and join - video note
Mark done

5. Using Python Documentation

Example problem (0:19)
Mark done

Navigating online documentation (0:46)
Mark done

Quiz 5 - Lists & Strings
Dec 2 | 8 pts | Submit

6. Data Structures: Tuples

Creating a tuple (1:04)
Mark done

Code Along Exercise : Max and min function (4:52)
Mark done

7. Data Structures: Sets

Creating a set (1:06)
Mark done

Iterating over and updating a set (0:21)
Mark done

Union of sets (1:23)
Mark done

Intersection of sets (1:02)
Mark done

8. Sorting

Sorted function vs. list sort method (1:25)
Mark done

Sorting with a key function (4:21)

Mark done

Sorting a list of tuples (2:42)
Mark done

Coding Demonstration : Write two sorting functions (9:18)
Mark done

Quiz 6 - Tuples & Sets
Dec 2 | 7 pts | Submit

Sorting Practice
Mark done

Coding Practice 3 : Implement Functions Related to Strings, Lists, Sets, & Tuples
100 pts | Submit

9. Debugging in PyCharm

Coding Demonstration : Using the PyCharm Debugger (20:22)

10. Assessment

Practice Quiz: Jupyter Notebook, IDLE, & PyCharm
5 pts | Submit

11. Weekly Check In

Module 3 Check - In

▾ **Module 4 : Unit Testing & Test-Driven Development**   [Complete All Items]

Module 4 : Unit Testing & Test-Driven Development
Mark done

1. Module Introduction & Resources

Module 4 Introduction (0:55)
Mark done

Module 4 Resources
Mark done

1. Unit Testing

What is unit testing? (0:37)
Mark done

Why unit test? (1:02)
Mark done

How to do unit testing (2:41)
Mark done

Test methods (0:35)
Mark done

Assert Methods
Mark done

Optional setUp & tearDown methods (0:43)
Mark done

Quiz 7 - Test Methods & Assert Methods
Dec 2 | 8 pts | Submit

Coding Practice 3B: String and List Functions (Unit Testing Practice)
100 pts

2. Unit Testing in PyCharm & TDD

Creating & running a testing file in PyCharm (1:41)
Mark done

Code Along Exercise : String method testing (4:52)
Mark done

A good Test-Driven Development (TDD) strategy - typical examples vs. edge-cases (1:07)

Mark done

Coding Demonstration : List example function testing (16:48)
Mark done

Coding Demonstration : Sentence counter function testing (6:53)
Mark done

Writing unit tests is mandatory (0:16)
Mark done

Quiz 8 - Unit Testing in PyCharm
Dec 2 | 5 pts | Submit

3. Weekly Check In

Module 4 Check - In

▾ **Module 5 : Dictionaries and Files**   [Complete All Items]

Module 5 : Dictionaries and Files
Mark done

1. Module Introduction & Resources

Module 5 Introduction (0:52)
Mark done

Module 5 Resources
Mark done

2. Data Structures: Dictionaries

Creating a dictionary (0:48)
Mark done

Key:value pairs (0:42)
Mark done

Updating a dictionary (0:49)
Mark done

Other ways to create a dictionary (4:31)
Mark done

Code Along Exercise : Grade/attendance book (9:22)
Mark done

Copying dictionaries (5:13)
Mark done

Coding Demonstration : Word count with unit testing (13:25)
Mark done

Quiz 9 : Dictionaries
Dec 2 | 10 pts | Submit

3. Files

Opening a file (0:55)
Mark done

Basics of file open method modes (1:16)
Mark done

File streams (0:32)
Mark done

Reading a file (0:41)
Mark done

Newline characters (0:34)
Mark done

Writing to a file (0:17)
Mark done

Closing a file (0:48)
Mark done

Practice Quiz : Python Dictionaries & Files
4 pts | Submit

Coding Demonstration : Open and read a file (3:36)
Mark done

Coding Demonstration : Open, read, and append to new file (3:02)
Mark done

Coding Demonstration : Open, read, and append to same file (3:08)
Mark done

Coding Demonstration : Open, read, and write to new file (2:56)
Mark done

Coding Demonstration : Working with csv files (10:37)
Mark done

Coding Demonstration : File to Dictionary (11:10)
Mark done

Quiz 10 : File I/O
Dec 2 | 7 pts | Submit

Intro to Coding Practice 4 (13:54)
Mark done

Coding Practice 4 : Online Banking System
100 pts | Submit

4. Assessment

Homework 4 : Make a Website
Sep 25 | 100 pts | Submit

5. Practice Python Exam

Raising a RuntimeError
Mark done

Banking Practice Exam: Python
100 pts | Mark done

📝 **Practice Midterm Exam: Login System**
100 pts | Mark done   ◯

Weekly Check In

📄   Module 5 Check - In

🔗   Weekly Check in

▾ **Module 6: Object-Oriented Programming with Python / Exam 1**

1. Module Introduction & Resources

📄   **Module 6: Object Oriented Programming with Python**

📄   **Module 6 Resources**

2. Python Objects & Classes

📄   **Object-Oriented Programming (4:04)**

📄   **Coding Demonstration: Creating a class (4:55)**

📄   **Coding Demonstration: Adding methods to a class (8:43)**

📄   **Coding Demonstration: Adding special methods to a class (2:18)**

3. Subclasses

📄   **Coding Demonstration- Subclasses (3:20)**

📄   **Coding Demonstration- Overriding methods (4:24)**

📄

Coding Demonstration- Instance variables vs. class variables (2:16)

📄   **Code Along Exercise- Creating a Business subclass (8:52)**

4. Coding Demonstrations

📄   **Coding Demonstration- Creating classes from a file (18:20)**

📄   **Coding Demonstration- Unit testing with classes (15:51)**

5. EXAM 1 : Python Exam

📄   **Exam 1 Instructions**

📝   **Exam 1 : Python Exam**
        Oct 8 | 100 pts

6. Weekly Check-in

🔗   **Week 6 Check in**

▾ **Module 7: Intro to Java, Classes, & Eclipse**   [Complete All Items]

📄   **Module 7: Intro to Java, Classes, & Eclipse**
        Mark done   ◯

1. Module Introduction & Resources

📄   **Module 7 Introduction (0:49)**
        Mark done   ◯

📄   **Module 7 Resources**
        Mark done   ◯

2. Introduction to Java

📄 **Java vs. Python (1:03)**
Mark done   ○

📄 **Java is compiled (0:47)**
Mark done   ○

📄 **Popularity of Java vs. Python (0:51)**
Mark done   ○

📄 **A bit more Java background**
Mark done   ○

3. Configuring Java & Tools

📄 **Installing & running Java (0:34)**
Mark done   ○

📄 **Downloading & installing the Java Development Kit (JDK) (0:10)**
Mark done   ○

📄 **Installing & configuring Eclipse (0:54)**
Mark done   ○

📄 **Installing & configuring Eclipse overview**
Mark done   ○

📄 **Eclipse overview (0:39)**
Mark done   ○

4. The Java Language

📄 **Simple introductory program (0:50)**
Mark done   ○

📄 **Some general rules for Java (1:18)**
Mark done   ○

📄 **Variables & data types (1:36)**
Mark done   ○

📄 **Declaring variables (0:49)**
Mark done   ○

📄 **Strings vs. chars (0:59)**
Mark done   ○

📄 **Printing (0:26)**
Mark done   ○

📄 **'while' loops (0:24)**
Mark done   ○

📄 **'for' loops (0:39)**
Mark done   ○

📄 **Getting input (0:41)**
Mark done   ○

📄 **Java comments & Javadocs (1:21)**
Mark done   ○

📄 **Math operators**
Mark done   ○

📄 **Casting**
Mark done   ○

📄 **'char' operations**
Mark done   ○

📄 **Coding Demonstration : Creating my first java project (0:57)**
Mark done   ○

📄 **Coding Demonstration : Creating my first class & using the main method (1:42)**
Mark done   ○

📄 **Coding Demonstration : Defining variables (1:53)**
Mark done   ○

📄 **Coding Demonstration : Strings and characters (2:04)**
Mark done   ○

📄 **Coding Demonstration : Math operations (3:16)**
Mark done   ○

📄 **Coding Demonstration : String operations (1:53)**

Mark done   ◯

📄 **Coding Demonstration : Conditionals and loops (7:57)**   ◯
Mark done

📄 **Coding Demonstration : Casting (7:20)**   ◯
Mark done

📄 **Coding Demonstration : User input (6:08)**   ◯
Mark done

📄 **Coding Demonstration : Adding Javadocs (1:12)**   ◯
Mark done

📝 **Coding Practice 9a: "Hello World" Java**   ◯
100 pts | Submit

🚀 **Quiz 13 - Intro to Java & The Java Language**   ◯
Dec 2 | 10 pts | Submit

5. Classes

📄 **Java is class based (0:42)**   ◯
Mark done

📄 **Defining a class (0:32)**   ◯
Mark done

📄 **Defining fields in a class (0:38)**   ◯
Mark done

📄 **Defining a constructor for a class (0:32)**   ◯
Mark done

📄 **Defining a method in a class (0:53)**   ◯
Mark done

📄 **Creating an instance of a class (0:30)**   ◯
Mark done

📄 **Coding Demonstration : Banking project (33:26)**   ◯
Mark done

📄 **Importing a Java Program into Eclipse**   ◯
Mark done

🚀 **Quiz 14 - Classes**   ◯
Dec 2 | 7 pts | Submit

📄 **Classes Demonstration**   ◯
Mark done

📝 **Coding Practice 9b : Simple Game**   ◯
100 pts | Submit

▼ **Module 8: Unit Testing, Arrays, & ArrayLists**   [Complete All Items]

📄 **Module 8: Unit Testing, Arrays, & ArrayLists**   ◯
Mark done

1. Module Introduction & Resources

📄 **Module 8 Introduction (0:50)**   ◯
Mark done

📄 **Module 8 Resources**   ◯
Mark done

2. Unit Testing

📄 **Why unit test? (0:33)**   ◯
Mark done

📄 **Disadvantages & advantages (0:42)**   ◯
Mark done

📄 **JUnit (0:28)**   ◯
Mark done

📄 **Terminology (0:32)**   ◯
Mark done

📄 **Assert methods (1:26)**
Mark done

📄 **Coding Demonstration : Counter project (15:01)**
Mark done

3. About Equality

📄 **Testing for equality (1:23)**
Mark done

📄 **Implementing the equals method (0:36)**
Mark done

📄 **Coding Demonstration : Comparing people (8:36)**
Mark done

📄 **More assert methods**
Mark done

📄 **Assert methods with floating point types (0:48)**
Mark done

📄 **Even more assert methods**
Mark done

📄 **Coding Demonstration : Banking project with unit testing (23:30)**
Mark done

🚀 **Quiz 15 - Unit Testing**
Dec 2 | 5 pts | Submit

📝 **Coding Practice 10 : Custom String**
100 pts | Submit

4. Arrays

📄 **Declaring & initializing arrays (3:10)**
Mark done

📄 **Initializing arrays in one line (0:40)**
Mark done

📄 **The length of an array (0:34)**
Mark done

📄 **Stepping through an array using a for loop or enhanced for loop (1:05)**
Mark done

📄 **Default values for primitives, Objects, & arrays (2:05)**
Mark done

📄 **Copying arrays (1:53)**
Mark done

📄 **Nested arrays (1:21)**
Mark done

📄 **Accessing values in nested arrays (0:37)**
Mark done

📄 **Array methods**
Mark done

5. Collections: ArrayLists

📄 **About the Collections Framework (0:45)**
Mark done

📄 **Creating an ArrayList (0:39)**
Mark done

📄 **The size of an ArrayList (0:34)**
Mark done

📄 **ArrayList methods**
Mark done

6. About toString

📄 **Printing primitives vs. Objects (0:37)**
Mark done

📄 **Implementing the toString method (3:29)**
Mark done

📄 **Coding Demonstration : Classroom project (27:03)**
Mark done

🚀 **Quiz 16 - Arrays & ArrayLists**
Dec 2 | 9 pts | Submit

📝 **Coding Practice 11 : Arrays & ArrayLists**
100 pts | Submit

7. Assessment

📝 **Homework 6: Movie Trivia**
Oct 30 | 100 pts | Submit

8. Weekly Check In

🔗 **Module 8 Check in**

▼ **Module 9: Static Variables, Methods, & Polymorphism Using Overloading**

(Complete All Items)

📄 **Module 9: Static Variables, Methods, & Polymorphism Using Overloading**
Mark done

1. Module Introduction & Resources

📄 **Module 9 Introduction (1:24)**
Mark done

📄 **Module 9 Resources**
Mark done

2. Static Variables

📄 **Instance variables vs. static variables (1:05)**
Mark done

📄 **Creating static variables (0:39)**

Mark done

📄 **Referencing static variables (0:37)**
Mark done

📄 **Using static variables for hard-coded values (1:11)**
Mark done

3. Static Methods

📄 **About static methods (0:36)**
Mark done

📄 **Static helper methods (0:23)**
Mark done

📄 **About Java's main method (0:25)**
Mark done

📄 **Using the String[] args in the main method**
Mark done

📄 **When to use a static method (0:36)**
Mark done

4. More Examples of Static Variables & Methods

📄 **Other use cases for static (1:15)**
Mark done

📄 **Other rules for static (0:25)**
Mark done

📄 **Coding Demonstration : Customer tracking project (24:56)**
Mark done

🚀 **Quiz 17 - Static Variables & Methods**
Dec 2 | 7 pts | Submit

5. Polymorphism - Overloading

📄 **Method signatures (0:57)**
Mark done ○

📄 **Polymorphism (0:32)**
Mark done ○

📄 **Overloading (0:44)**
Mark done ○

📄 **Why overload a method? (1:30)**
Mark done ○

📄 **DRY (Don't Repeat Yourself) principle of software development (0:43)**
Mark done ○

📄 **Legal vs. illegal variable assignments and method calls (1:43)**
Mark done ○

📄 **Java uses the most specific method (0:44)**
Mark done ○

📄 **Multiple constructors (8:50)**
Mark done ○

📄 **Coding Demonstration : Dog project (39:06)**
Mark done ○

🚀 **Quiz 18 - Polymorphism - Overloading**
Dec 2 | 6 pts | Submit ○

📝 **Coding Practice 12 : Custom Integer ArrayList**
100 pts | Submit ○

6. Weekly Check In

🔗 **Module 9 Check in**

▾ **Module 10: Inheritance, Polymorphism Using Overriding, & Access Modifiers**
(Complete All Items)

📄 **Module 10: Inheritance, Polymorphism Using Overriding, & Access Modifiers**
Mark done ○

1. Module Introduction & Resources

📄 **Module 10 Introduction (0:57)**
Mark done ○

📄 **Module 10 Resources**
Mark done ○

2. Inheritance

📄 **Superclasses and subclasses (1:22)**
Mark done ○

3. Polymorphism – Overriding

📄 **A review of method signatures (0:54)**
Mark done ○

📄 **How to override a method (1:38)**
Mark done ○

📄 **Why override a method? (0:44)**
Mark done ○

📄 **Overriding toString (1:50)**
Mark done ○

📄 **A review of overriding equals (1:56)**
Mark done ○

📄 **Overriding equals for JUnit tests (7:33)**
Mark done ○

📄 **How to require @Override in Eclipse**
Mark done ○

4. Constructors & Calling Overriden Methods

Overriding constructors (1:11)

| 📄 | Mark done | ○ |

| 📄 | **Calling an overridden method (4:53)**
Mark done | ○ |

| 📄 | **Why call an overridden method? (0:18)**
Mark done | ○ |

| 📄 | **Summary : Overloading vs. Overriding**
Mark done | ○ |

| 🚀 | **Quiz 19 - Inheritance & Polymorphism - Overriding**
Dec 2 | 8 pts | Submit | ○ |

5. Access Modifiers

| 📄 | **Restricting scope (2:00)**
Mark done | ○ |

| 📄 | **Public vs. protected vs. default vs. private (0:29)**
Mark done | ○ |

| 📄 | **Which access modifier should I use? (0:34)**
Mark done | ○ |

| 📄 | **Getters & setters and encapsulation (1:13)**
Mark done | ○ |

| 📄 | **Coding Demonstration : Animals management project (39:06)**
Mark done | ○ |

| 🚀 | **Quiz 20 - Access Modifiers**
Dec 2 | 8 pts | Submit | ○ |

| 📝 | **Coding Practice 13 : Vehicles**
100 pts | Submit | ○ |

6. Assessment

| 📄 | **Version Control & Git**
Mark done | ○ |

| | **Generating JavaDoc HTML Files** | |

| 📄 | Mark done | ○ |

| 📝 | **Homework 7: Battleship**
Nov 13 | 100 pts | Submit | ○ |

| 📄 | **A Bit More About Battleship**
Mark done | ○ |

7. Weekly Check In

| 🔗 | **Module 10 Check in** | |

| ▼ **Module 11: Abstract Classes, Interfaces, & Debugging** | | **Complete All Items** |

| 📄 | **Module 10: Abstract Classes, Interfaces, & Debugging**
Mark done | ○ |

1. Module Introduction & Resources

| 📄 | **Module 11 Introduction (0:59)**
Mark done | ○ |

| 📄 | **Module 11 Resources**
Mark done | ○ |

2. Abstract Classes

| 📄 | **Abstract methods (0:25)**
Mark done | ○ |

| 📄 | **Declaring abstract classes (0:23)**
Mark done | ○ |

| 📄 | **Extending abstract classes (0:35)**
Mark done | ○ |

| 📄 | **Combining abstract & non-abstract methods (0:47)**
Mark done | ○ |

Why have abstract classes? (0:33)
Mark done

Common syntax errors with subclasses (1:31)
Mark done

Possible solutions to the syntax problem (0:41)
Mark done

Solution to syntax problem using abstract class (0:37)
Mark done

Code Along : Pet project (32:12)
Mark done

Coding Practice 14 : Shapes
100 pts | Submit

3. Interfaces

Intro to interfaces (0:37)
Mark done

Common Java interfaces (0:38)
Mark done

Designing your own interfaces (0:27)
Mark done

Implementing an interface (0:39)
Mark done

Partially implementing an interface (0:31)
Mark done

So what are interfaces really for? (0:53)
Mark done

How to use an interface (0:56)
Mark done

Coding Demonstration : Shape interface project (38:20)
Mark done

Quiz 21 - Abstract Classes & Interfaces
Dec 2 | 7 pts | Submit

4. Debugging

What is debugging? (0:23)
Mark done

Debugging support in Eclipse (0:23)
Mark done

Setting breakpoints
Mark done

Starting the debugger
Mark done

Controlling program execution
Mark done

Evaluating variables in the debugger
Mark done

Returning to the Java perspective
Mark done

Coding Demonstration : IntelliJ debugger (37:34)

5. Demonstrations

Coding Demonstration : Debugging Person class - IndexOutOfBoundsException, & NullPointerException (11:45)
Mark done

Coding Demonstration : Debugging syllable counter - Using Step Into, Step Over, & Step Return (45:56)
Mark done

Debugging battleship

Mark done ◯

🚀 **Quiz 22 - More with Abstract Classes & Debugging** ◯
Dec 2 | 8 pts | Submit

6. Weekly Check In

🔗 **Module 11 Check in**

▼ Module 12: File I/O & Exceptions   ┤ Complete All Items ├

📄 **Module 12: File I/O & Exceptions** ◯
Mark done

1. Module Introduction & Resources

📄 **Module 12 Introduction (1:14)** ◯
Mark done

📄 **Module 12 Resources** ◯
Mark done

2. File I/O

📄 **Why Java I/O is difficult (0:16)** ◯
Mark done

📄 **Streams (0:34)** ◯
Mark done

📄 **How to do I/O (0:15)** ◯
Mark done

📄 **Opening & reading a file, using FileReader & BufferedReader (1:14)** ◯
Mark done

📄 **Opening & reading a file, using Scanner (1:13)** ◯
Mark done

📄 **For reference: Opening & reading a file, using Files** ◯
Mark done

📄 **File writing, using FileWriter & PrintWriter (1:00)** ◯
Mark done

📄 **File writing, using FileWriter & BufferedWriter (0:58)** ◯
Mark done

📄 **For reference: File writing, using Files** ◯
Mark done

📄 **File types (0:36)** ◯
Mark done

🚀 **Quiz 23 - File I/O** ◯
Dec 2 | 8 pts | Submit

3. Exceptions

📄 **Errors vs. exceptions (0:22)** ◯
Mark done

📄 **What to do about errors & exceptions (0:23)** ◯
Mark done

📄 **Dealing with exceptions (0:28)** ◯
Mark done

📄 **The problem with handling files (0:32)** ◯
Mark done

📄 **Three ways to deal with errors (0:40)** ◯
Mark done

📄 **The try-catch statement (0:33)** ◯
Mark done

📄 **'finally' (0:43)** ◯
Mark done

📄 **Two ways to deal with exceptions (1:29)**
Mark done ○

📄 **Errors & exceptions are Objects (0:32)**
Mark done ○

📄 **The exception hierarchy (0:35)**
Mark done ○

📄 **Different kinds of built-in exceptions**
Mark done ○

📄 **Different kinds of built-in errors**
Mark done ○

4. Demonstrations (File I/O Examples)

📄 **Using Scanner, & FileNotFoundException (13:00)**
Mark done ○

📄 **Using FileReader & BufferedReader, & FileNotFoundException, IOException (19:18)**
Mark done ○

📄 **Using FileWriter & PrintWriter, & IOException (7:50)**
Mark done ○

🚀 **Quiz 24 - More with File I/O & Exceptions**
Dec 2 | 7 pts | Submit ○

📝 **Coding Practice 15 : Information Parser**
100 pts | Submit ○

5. Weekly Check In

🔗 **Module 12 Check in**

▼ **Module 13: Collections, Maps, & Regular Expressions**   [Complete All Items]

📄 **Module 13: Collections, Maps, & Regular Expressions**
Mark done ○

1. Module Introduction & Resources

📄 **Module 13 Introduction (1:04)**
Mark done ○

📄 **Module 13 Resources**
Mark done ○

2. Collections & Maps

📄 **About the Collections Framework-2 (0:55)**
Mark done ○

📄 **Types of collections & "collection-like" things (maps) (0:43)**
Mark done ○

📄 **Hierarchy of collections (0:58)**
Mark done ○

📄 **Hierarchy of "collection-like" things (maps) (0:30)**
Mark done ○

📄 **Methods in the collection interface (0:56)**
Mark done ○

📄 **Implementations (0:34)**
Mark done ○

📄 **List interface (0:45)**
Mark done ○

📄 **Deque interface (0:51)**
Mark done ○

📄 **Set interface (0:15)**
Mark done ○

📄 **Map interface (0:33)**
Mark done ○

General rules for selecting an implementation (0:53)
Mark done

Iterator (1:05)
Mark done

Comparable interface (2:45)
Mark done

Sorting & searching collections
Mark done

Arrays class
Mark done

Quiz 25 - Collections/Maps
Dec 2 | 8 pts | Submit

3. Demonstrations

Coding Demonstration : Remove range from a list using an Iterator (7:42)
Mark done

Coding Demonstration : Add stars to a list using ArrayList (6:59)
Mark done

Coding Demonstration : Count words using a HashMap (6:16)
Mark done

Coding Demonstration : Count unique words using a HashSet (5:45)
Mark done

Coding Demonstration : Count unique words, and ignore case, using a TreeSet (4:39)
Mark done

Coding Demonstration : Remove duplicates using a LinkedHashSet (5:57)
Mark done

Coding Demonstration : Set food toppings using a HashMap (6:24)
Mark done

Coding Demonstration : Create friends network using a TreeMap of TreeSets (16:39)
Mark done

Coding Demonstration : Union sets using a HashSet of TreeSets (9:55)
Mark done

4. Regular Expressions

What is a regular expression? (0:30)
Mark done

5. More Demonstrations

Coding Demonstration : Split a String using str.split() (15:45)
Mark done

Coding Demonstration : Replace all with a pattern using str.replaceAll() (3:51)
Mark done

Coding Demonstration : Get parts of a phone number using groups and character classes (15:26)
Mark done

Coding Demonstration : Replace an area code using str.replaceFirst() (4:17)
Mark done

Coding Demonstration : Format a phone number using grouping (7:45)
Mark done

Coding Demonstration : Starts or ends with a number (7:12)
Mark done

Coding Demonstration : Get parts of an email address using grouping and character classes (11:43)
Mark done

Coding Demonstration : Split String into sentences and extract quote using str.split() (7:36)
Mark done

📄 **Coding Demonstration : Recursion in Java with examples**

🚀 **Quiz 26 - More with Collections/Maps & Regular Expressions**
Dec 2 | 6 pts | Submit

📝 **Coding Practice 16 : Word Counter**
100 pts | Submit

6. Assessment

📝 **Homework 8: Student Management System**
Nov 28 | 100 pts | Submit

7. Weekly Check In

🔗 **Module 13 Check in**

▾ **Module 14: Exam 2**   (Complete All Items)

📝 **Practice Exam Part 1: Java**
100 pts | Submit

▾ **Optional Module: Connecting to Databases & Version Control Using Git**
(Complete All Items)   ⊖

📄 **Optional Module: Connecting to Databases & Version Control Using Git**
Marked done   ✓

1. Module Introduction & Resources

📄 **Optional Module: Introduction (1:16)**
Marked done   ✓

📄 **Reading: Optional Module Resources**
Marked done   ✓

2. Connecting to Databases

📄 **What is SQL? (0:16)**
Mark done

📄 **What is a database? (0:20)**
Mark done

📄 **Relational databases (0:35)**
Mark done

📄 **A database is sort of like Excel (0:30)**
Mark done

📄 **How do I open a database? (0:30)**
Mark done

3. JDBC (Java Database Connectivity)

📄 **Accessing relational databases from Java (0:22)**
Mark done

📄 **JDBC Driver (1:08)**
Mark done

4. Coding Demonstrations : Feedback database project

📄 **Setting up MySQL server & creating database (0:21)**
Mark done

📄 **Opening & closing a connection to the database (16:36)**
Mark done

📄 **Reading from the database (13:17)**
Mark done

📄 **Reading from the Database - Video note**
Mark done

📄 **Writing to the database (26:23)**
Mark done

📄 **Filtering data in the database (10:55)**
Mark done

📄 **For reference: Setting up a MySQL Database**
Mark done

📄 **For reference: MySQL Workbench**
Mark done

🚀 **Quiz 27 - Connecting to Databases**
7 pts | Submit

5. Version Control & Git

📄 **REQUIREMENTS AROUND USAGE OF VERSION CONROL & GIT IN THIS COURSE**
Mark done

📄 **Version control systems (0:53)**
Mark done

📄 **Why version control? (0:32)**
Mark done

📄 **Why git? (0:42)**
Mark done

📄 **Learning git (0:29)**
Mark done

6. Setting Up & Configuring GitHub

📄 **Setting up a GitHub account (0:50)**
Mark done

📄 **Creating a Repository (3:31)**
Mark done

7. Setting Up & Configuring Eclipse

📄 **Git support for Eclipse (0:18)**
Mark done

📄 **Installation of git support in Eclipse (0:22)**
Mark done

8. Collaborating on a Project

📄 **Setting up a Personal Access Token (PAT)**
Mark done

📄 **Adding an Eclipse Project to Git (17:36)**
Mark done

📄 **Setting up & configuring a collaborator (11:58)**
Mark done

📄 **Pulling & merging changes (2:56)**
Mark done

📄 **Branching (5:43)**
Mark done

📄 **Pulling & merging branches (5:55)**
Mark done

📄 **Where to go from here**
Mark done

🚀 **Quiz 28 - Version Control/Git**
8 pts | Submit

▼ **Optional Module: Data Analysis Using Python**   (Complete All Items)

📄 **Optional Module: Data Analysis Using Python**
Mark done

1. Module Introduction & Resources

Optional Module: Introduction (0:54)
Mark done

Optional Module Resources
Mark done

2. Data Analysis: Loading, Inspecting, & Querying Data

The pandas module (0:44)
Mark done

Loading data (1:42)
Mark done

Inspecting data (1:24)
Mark done

Querying data (0:48)
Mark done

Casting data
Mark done

Cleaning data & dealing with missing values
Mark done

Coding Practice 5: Load, Inspect, & Query Movie & Ratings Data
100 pts | Submit

3. Data Analysis: Joining & Filtering Data

Joining data (1:00)
Mark done

Code Along Exercise : Join data (6:40)
Mark done

Slicing rows (2:22)
Mark done

Querying data using boolean indexing (6:21)
Mark done

Code Along Exercise : Dive bar recommendation in Las Vegas (4:46)
Mark done

Computations - sum() (1:11)
Mark done

Computations - mean() (0:47)
Mark done

Other methods (0:27)
Mark done

Updating & creating data (0:43)
Mark done

Code Along Exercise : Add rating column (1:56)
Mark done

Quiz 11 - Loading, Querying, Joining, & Filtering Data
10 pts | Submit

Coding Practice 6: Join & Filter Movie & Ratings Data
100 pts | Submit

4. Data Analysis: Summarizing data

Summarizing groups (0:52)
Mark done

The numpy library (0:49)
Mark done

Pivot tables (0:29)
Mark done

Using an index (0:41)
Mark done

📄 **Code Along Exercise : Average review count and rating (2:18)**
Mark done ○

📄 **Aggregate functions (2:08)**
Mark done ○

📝 **Coding Practice 7: Summarize Movie & Ratings Data**
100 pts | Submit ○

5. Data Analysis: Visualizing Data

📄 **Jupyter notebook magic functions (0:21)**
Mark done ○

📄 **The matplotlib library (0:28)**
Mark done ○

📄 **Histograms (0:36)**
Mark done ○

📄 **Histograms Coding Demonstration : To show distribution of data (0:29)**
Mark done ○

📄 **Histograms Coding Demonstration : Preparing data (1:41)**
Mark done ○

📄 **Histograms Coding Demonstration : Setting options for PyPlot (1:29)**
Mark done ○

📄 **Histograms Coding Demonstration : Displaying the visualization (3:43)**
Mark done ○

📄 **Scatterplots (0:34)**
Mark done ○

📄 **Scatterplots Coding Demonstration : To compare data points on different dimensions (0:13)**
Mark done ○

📄 **Scatterplots Coding Demonstration : Preparing data (1:17)**
Mark done ○

📄 **Scatterplots Coding Demonstration : Setting options for PyPlot (2:46)**
Mark done ○

📄 **Scatterplots Coding Demonstration : Displaying the visualization (1:33)**
Mark done ○

📄 **Bar charts and plotting pivot tables**
Mark done ○

📄 **For reference: Seaborn**
Mark done ○

🚀 **Practice Quiz - Summarizing & Visualizing Data**
11 pts | Submit ○

📝 **Coding Practice 8: Visualize Movie & Ratings Data**
100 pts | Submit ○

6. Assessment

📝 **Optional Homework: Analyze Celebrity Deaths**
100 pts | Submit ○