

Intro to Programming: Java, Part 1



How to Take This Course

Complete all of the quizzes and the assignment in each unit. Once the quizzes for a unit are complete, you will have access to the **unit test**. Read the full course instructions so you understand how this course works.

-  How This Course Works
-  Instructions for the Course
-  Ask The Teacher

Meet your teacher for this course and ask a question.

1. Program Design

In this unit you will learn:

- What a program is, and how it is executed by a computer.
- The various types of programming languages, including web-based languages such as HTML and higher level languages, like Java and C++.
- How Java works in conjunction with the Java Virtual Machine (JVM) and Java Runtime Environment (JRE).
- How to install Java and start writing programs.
- How to install and use Eclipse, a popular integrated development environment.
- How to flowchart a process before writing a program.

1.1 What is Programming?



1.1 Quiz



1.2 Types of Programming Languages



1.2 Quiz



1.3 Installing Java



1.3 Quiz



 1.4 Setting up a Development Environment	☐
 1.4 Quiz	☐
 1.5 Process Flowcharts	☐
 1.5 Quiz	☐
 Unit 1 Assignment	☐

2. Variables, Expressions, and Assignment

In this unit you will learn:

- How naming conventions make programs more understandable and easier to read.
- How to use boolean, integers, floating point numbers and other primitive data types.
- How to use variables, constant and literal data types in Java programs.
- Where, when and hot to use methods.
- How to use comment, arguments and parameters in your Java programs

 2.1 Naming Conventions	☐
 2.1 Quiz	☐
 2.2 Primitive Data Types	☐
 2.2 Quiz	☐
 2.3 Variables, Constants, and Expressions	☐
 2.3 Quiz	☐
 2.4 Methods	☐
 2.4 Quiz	☐
 2.5 Arguments & Parameters	☐
 2.5 Quiz	☐
 Unit 2 Assignment	☐

3. Reference types and other data structures

In this unit you will learn:

- About object-oriented languages, objects, classes and constructors.
- Where and how to use strings.
- Where and how to use arrays.
- Where and how to use arraylists.

 3.1 Classes & Objects	☐
 3.1 Quiz	☐
 3.2 Strings	☐
 3.2 Quiz	☐
 3.3 Arrays	☐
 3.3 Quiz	☐
 3.4 ArrayList	☐
 3.4 Quiz	☐
 Unit 3 Assignment	☐

4. Control Structures

In this unit you will learn:

- How to use conditional statements, such as If and Else.
- How to create a loop to iterate and repeat a process.
- How functions can call themselves in a process called recursion.

	4.1 Conditionals	☐
	4.1 Quiz	☐
	4.2 Iteration	☐
	4.2 Quiz	☐
	4.3 Recursion	☐
	4.3 Quiz	☐
	Unit 4 Assignment	☐

5. Operations

In this unit you will learn:

- How to traverse an array of data to view the contents
- An introduction to the various logical operators such as =,+, /, % and *.

	5.1 Traversal	☐
	5.1 Quiz	☐
	5.2 Logical Operators	☐
	5.2 Quiz	☐
	Unit 5 Assignment	☐

Final Exam

Complete all of the assignments and unit tests in this course. Once they are complete and the assignments have been graded, the Final will be made available and appear below the [Practice Final](#).

Warning: You have only ONE attempt at the Final. You must score 60% or higher in the Final to receive credit for the course!

Are you ready to take the Final? We highly recommend you take the [Practice Final](#) first and if you are weak in any area, review the relevant course material again. You have unlimited attempts at the [practice final](#); it will help you to prepare.

Good Luck!!

	Final Assignment	☐
	Practice Final	☐

Course Completion

The "Certificate" and "Transcript Request" links below are not active, they cannot be accessed until you have achieved at least 60% on both the final and for the course total. Upon satisfying these two requirements, the links will become active and you can use them.

Before you go, we would appreciate your opinion on the course, please take 1 minute to complete the feedback form. We hope you enjoyed this course!

	Course Feedback	
	Thank you for taking this course! Let us know what you think about it.	
	Request a Course Completion Record	
	If you need SVHS to send proof of your course completion directly to your school complete this form.	

Restricted Not available unless:

- You achieve a required score in **Course total**
- You achieve a required score in **Final Exam**



Certificate of Completion

Restricted Not available unless:

- You achieve a required score in **Course total**
- You achieve a required score in **Final Exam**