

Course: Intro to Java

Lecture 1 - Introduction to Java

- The history of Java programming
- Features of Java language
- Java application types
- Java application types virtual machine
- Installation of Java

Lecture 2 - Java Language Foundations I

- Syntax
- Output
- Comments
- Variables
- Operators
- Strings
- Math

Lecture 3 - Java Language Foundations II

- Booleans
- If...Else
- Switch
- While Loop
- For Loop
- Break/Continue
- Arrays

Lecture 4 - Java Methods and Files

- Method parameters
- Return value
- Method overloading
- Java Recursion
- Write Files
- Load Files
- Delete Files

Lecture 5 - Java Classes

- Classes/Objects
- Class Attributes
- Constructors
- User Input

- Date and Time
- ArrayList

Lecture 6 - Special Lesson I: Java in Data Analysis

- Types of data analysis problems and the corresponding techniques
- Statistics in Java and Java Statistic Packages
- Data visualization using Tablesaw in Java
- Machine learning in Java
Case study: Linear regression; classification

Lecture 7: Special Lesson II: Java in App Development

- Layout editor
- App views and constraints
- Appearance of the buttons and TextView
- Make App interactive