

1 IMPORTANT

If possible bring your own laptop to these labs so you can learn to install and work with an IDE. A couple of popular IDEs for Java development are IntelliJ and Eclipse. We recommend using IntelliJ because of its robust ecosystem, intuitive interface, and reliability.

2 Goals

Step 1: Research what IDE to install and complete the prelab by installing and configuring an IDE

Step 2: Experience using an IDE and tools it provides like the debugger, compilation, and Git integration

Step 3: Become familiar with the general Java vocabulary and idiomatic practices

Step 4: Experience implementing Java software starting with basic concepts like:

- A. I/O
- B. Primitive types
- C. Functionality of main
- D. Instantiating class objects
- E. Inheritance
- F. Recursion

Step 5: Complete the self check quizzes as a knowledge check

Step 6: If everything is completed then move on to the optional advanced topics of:

- A. Useful usage of static and initialization blocks
- B. Using Java collections and iterators and creating your own generic types
- C. Interfaces versus Abstract Classes and psuedo-multiple inheritance