

Preparing For Programming in Java 1 and Java 2

Introduction

To write programs in these courses, you need a variety of tools. We will be using the *Java Development Kit (JDK)*, an *Integrated Development Environment (IDE)*, and a library of tools specifically tailored to the needs of this course, *javaintro-xx-xx.jar*. The following is a description of the necessary tools.

Java 1

You will need a storage medium, such as a disk or thumb drive, to organize your work. Virtually all modern media support a structure known as a *directory*, also referred to as a *folder*. Create a directory named 'JavaWork' under your home directory. In your JavaWork directory, create a subdirectory called 'lib'. In my JavaWork directory, I also create subdirectories named 'Chapter1,' 'Chapter2,' etc., where I can organize work associated with each chapter in our textbook.

The default IDE for Java 1 is *BlueJ*, which has the advantage of including the JDK. If you already have a favorite IDE (or other development environment), feel free to use it. Otherwise, follow the instructions on the [BlueJ Home Page](#) for downloading and installing BlueJ.

Next, navigate to our course homepage, [Computer Programming in Java](#). Find the *Downloads* page and download the jar file, *javaintro-xx-xx.jar*. Place it in the *lib* subdirectory of your *JavaWork* directory. Start BlueJ, pull down the *Tools* menu, and open the *Preferences* dialog. In the dialog, find the *Libraries* tab and push the *Add File* button; this will start a *File Chooser* dialog, such as *File Explorer* (Windows) or *Finder* (Mac). Use this dialog to navigate to your *JavaWork/lib* directory, and select the jar file that you downloaded from the course homepage.

And that's it. If you're doing this at home, you can get started with BlueJ by following the [BlueJ Tutorial](#).

Java 2

To complete the Java 2 course, you are welcome to continue using the programming tools we used in Java 1. However, I will be switching to the *Eclipse* IDE, and I suggest you do the same. Switching to Eclipse will require you to do some preparation in advance of class. If you have trouble setting up *Eclipse* (or your IDE of choice), we will be happy to assist you in class during breaks or office hours. We will not spend lecture time on installation issues, as we did in Java 1. To install *Eclipse*:

1. Download the installer for the latest JDK for your operating system from the [Java Downloads](#) page.
2. Follow the installation instructions on the downloads page.
3. Download and execute the Eclipse installer from the [Eclipse Downloads](#) page. Follow the prompts for installing the Eclipse IDE for Java Developers.
4. Follow a tutorial for Java development using Eclipse; a couple of possibilities are:
 - a. [Eclipse Tutorial](#) at Tutorialspoint
 - b. [Using the Eclipse IDE for Java programming](#) by Vogella
 - c. [Building a Java Application in the Eclipse IDE](#) from dev.java
5. If you haven't already done so, create a *lib* subdirectory in your Eclipse workspace (or anywhere adjacent to where you will be storing your coursework). Navigate to our course homepage, [Computer Programming in Java](#). Find the *Downloads* page and download the jar file, *javaintro-xx-xx.jar*. Place it in the *lib* subdirectory.
6. Create a new project. Right-click on the project name and select Build Path → Add External Archives; this will open a *File Chooser* dialog. Navigate to your *lib* subdirectory, and select the *javaintro* jar file.