

Create directory -“FM_cofoja”. Download “Sample code” from course webpage and extract the content to “FM_cofoja”.

Please install the latest JDK

<http://www.oracle.com/technetwork/java/javase/downloads/index.html>

Please create an environment variable for JAVA_HOME (path-to-jdk-folder). Add JAVA_HOME/bin to PATH. (%JAVA_HOME%/bin in windows)

The source code in the FM_cofoja has a folder structure. Future cofoja assignments will follow the same structure. If you wish to change it, you may need to make changes in the configuration files.

Some methods of running the sample tasks are discussed below.

Command line:

This approach does not require gradle or any specific IDE. Any editor can be used to change the code.

- 1) ‘cd’ to FM_cofoja directory.
- 2) Run ./testrun.bat. (or testrun.sh for Linux)

./testrun.bat has the ‘javac’ command. The command is as shown below. You can modify if you prefer any other format. This command is for the stack example. We will need to change the text in bold for other tasks. Please feel free to change it to accept arguments as a script if you prefer.

```
javac -cp "lib/cofoja.asm-1.2-20140817.jar;lib/junit-4.12.jar" "-  
Acom.google.java.contract.classpath=lib/cofoja.asm-1.2-20140817.jar"  
"-Acom.google.java.contract.classoutput=bin" -d bin  
src/main/java/task/stack/*.java src/test/java/task/stack/*.java
```

```
java "-javaagent:lib/cofoja.asm-1.2-20140817.jar" -cp "bin;lib/*"  
org.junit.runner.JUnitCore task.stack.StackTest
```

The other methods require gradle. Please install gradle -

<https://services.gradle.org/distributions/gradle-2.3-all.zip> . The install instructions are here -
<https://gradle.org/docs/current/userguide/installation.html>.

Add GRADLE_HOME/bin to PATH.

Gradle from command line-

- 1) ‘cd’ to FM_cofoja directory.
- 2) Run “gradle -i build”.

IntelliJ IDE:

- 1) Please install the IDE - <https://www.jetbrains.com/idea/download/>
- 2) On the welcome window, please select "Import Project"
- 3) Browse to the FM_cofoja directory and select "build.gradle" file.
- 4) On next window, please ensure "Gradle Home" path is correct and click OK.
- 5) Select "Make Project" from the "Build" menu.
- 6) Open the test file from "src/test" (e.g StackTest) and click "Run" from "Run" menu.
- 7) Select the gradle configuration of "StackTest" from the selection.

Eclipse IDE:

The steps here use gradle to run the task in eclipse.

- 1) Install eclipse for Java - <https://eclipse.org/downloads/>
- 2) In command prompt – 'cd' to FM_cofoja directory
- 3) Run "gradle eclipse" – This will create an eclipse project.
- 4) Open eclipse and select "Import" from "File" menu.
- 5) On the "Import" window, select "Existing Project into Workspace" from the "General" folder.
- 6) Select FM_cofoja folder as root directory. FM_cofoja should appear under "Projects"
- 7) Click "Finish"
- 8) Select "External tool configuration" from the "Run" menu. (Run > External Tools > External Tool configuration)
- 9) On the "External tool configuration" window, select "Program" and click "New launch configuration" on the top.
- 10) You may change the name of the configuration to "build_gradle"
- 11) Select the "gradle.bat" ("gradle" on Linux) file from the file system using the "Browse File System". It is in GRADLE_HOME/bin.
- 12) Select the workspace as the "working directory", using "Browse workspace" button.
- 13) Type "-i build" in "Arguments" box.
- 14) Click "Apply" and "Run". Use "gradle_build" configuration for further builds.