Abstract: This program is built using Oracle JDK 8 which is available at <https://www.oracle.com/java/technologies/downloads/#java8-windows>. If the system default java version is not JDK 8, please run the already compiled class Using **<Your JDK8 java.exe file location> Main**

**NOTE for using Main.java**

1. This program is built using Oracle JDK 8 which is available at https://www.oracle.com/java/technologies/downloads/#java8-windows

(1)I installed multiple JDKs so I have to specify the JDK when I compile and run, I neeed to specify my JDK version and classpath:

"C:\Program Files\Java\jdk1.8.0\_351\bin\java.exe" -classpath "C:\Program Files\Java\jdk1.8.0\_351\jre\lib\charsets.jar;C:\Program Files\Java\jdk1.8.0\_351\jre\lib\deploy.jar;C:\Program Files\Java\jdk1.8.0\_351\jre\lib\ext\access-bridge-64.jar;C:\Program Files\Java\jdk1.8.0\_351\jre\lib\ext\cldrdata.jar;C:\Program Files\Java\jdk1.8.0\_351\jre\lib\ext\dnsns.jar;C:\Program Files\Java\jdk1.8.0\_351\jre\lib\ext\jaccess.jar;C:\Program Files\Java\jdk1.8.0\_351\jre\lib\ext\jfxrt.jar;C:\Program Files\Java\jdk1.8.0\_351\jre\lib\ext\localedata.jar;C:\Program Files\Java\jdk1.8.0\_351\jre\lib\ext\nashorn.jar;C:\Program Files\Java\jdk1.8.0\_351\jre\lib\ext\sunec.jar;C:\Program Files\Java\jdk1.8.0\_351\jre\lib\ext\sunjce\_provider.jar;C:\Program Files\Java\jdk1.8.0\_351\jre\lib\ext\sunmscapi.jar;C:\Program Files\Java\jdk1.8.0\_351\jre\lib\ext\sunpkcs11.jar;C:\Program Files\Java\jdk1.8.0\_351\jre\lib\ext\zipfs.jar;C:\Program Files\Java\jdk1.8.0\_351\jre\lib\javaws.jar;C:\Program Files\Java\jdk1.8.0\_351\jre\lib\jce.jar;C:\Program Files\Java\jdk1.8.0\_351\jre\lib\jfr.jar;C:\Program Files\Java\jdk1.8.0\_351\jre\lib\jfxswt.jar;C:\Program Files\Java\jdk1.8.0\_351\jre\lib\jsse.jar;C:\Program Files\Java\jdk1.8.0\_351\jre\lib\management-agent.jar;C:\Program Files\Java\jdk1.8.0\_351\jre\lib\plugin.jar;C:\Program Files\Java\jdk1.8.0\_351\jre\lib\resources.jar;C:\Program Files\Java\jdk1.8.0\_351\jre\lib\rt.jar;C:\Users\19092\OneDrive - Johns Hopkins\year2\Term1\JAVA\Module12\Assignment12\out\production\Assignment12" Main

(2)If only want to run the already compiled .Class file,use:

<Your JKK8 java.exe file location> Main

Example: compile "C:\Program Files\Java\jdk1.8.0\_351\bin\java.exe" Main

2.If running using a higher version of JDK, you should download and configure JavaFX which is available at https://openjfx.io/

If JavaFX is not installed, ' JavaFX: Runtime Components are Missing' will occur and here is a sample solution: https://edencoding.com/runtime-components-error/

vmArgs should be add to java runtime configuration

Sample vmArgs: "--module-path C:/Users/19092/Downloads/openjfx-19\_windows-x64\_bin-sdk/javafx-sdk-19/lib --add-modules javafx.controls,javafx.fxml"