

Supplement I.A: Installing and Configuring JDK

For Introduction to Java Programming

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This supplement covers the following topics:

- Downloading JDK (§1.2)
- Installing JDK (§1.3)
- Configuring JDK (§1.3)
- Verifying Configurations (§1.4)

1.1 Downloading JDK

You can download the latest JDK from <http://java.sun.com/javase/downloads/index.jsp>. A new version of JDK is released every six months. At the writing of this supplement, the current version is JDK 11. Consult with your instructor to download an appropriate version and update. Note Java downloaded from this Website is free for educational use. If you use it in a commercial product, download it from <http://jdk.java.net/>.

1.2 Installing JDK 11 on Windows

Download the file named **jdk-11.0.1_windows-x64_bin.exe** (for 64-bit Windows). Since Java is frequently updated, the file you have downloaded may be named slightly differently. Follow the steps below to install JDK 11:

1. Double click **jdk-11.0.1_windows-x64_bin.exe** to run the installation program. You will see the JDK 11 Setup dialog displayed.
2. Click *Next* to display the JDK Custom Setup dialog.
3. You may install JDK in a custom directory. For simplicity, don't change the directory. Click *Next* to install JDK.
4. After installation completed, the Complete dialog is displayed. Click *Finish* to close the dialog.

1.3 Configuring JDK 11 on Windows

To configure JDK is to make it available in the operating system so that Windows can find your JDK commands such as **javac**.

To do so, set the environment variables as follows:

1. Open the System Properties window, as shown in Figure 1. In the System properties window, click *Environment Variables* in the Advanced tab to display the Environment Variables window, as shown in Figure 2.

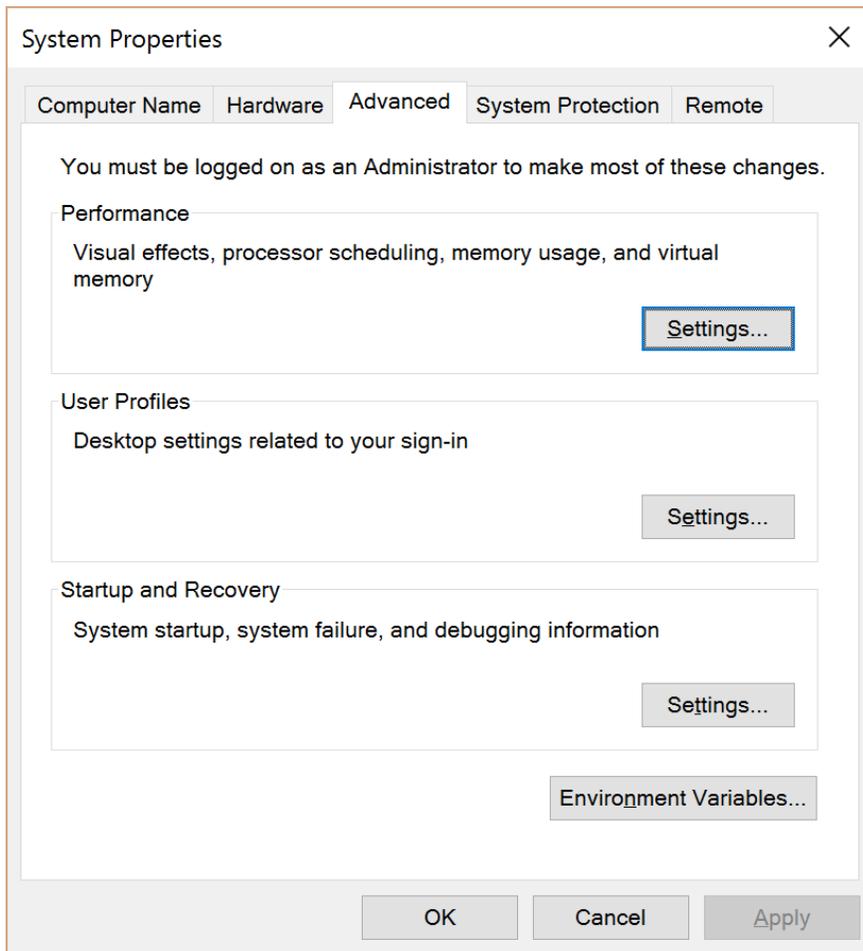


Figure 1

The System Properties window contains system information.

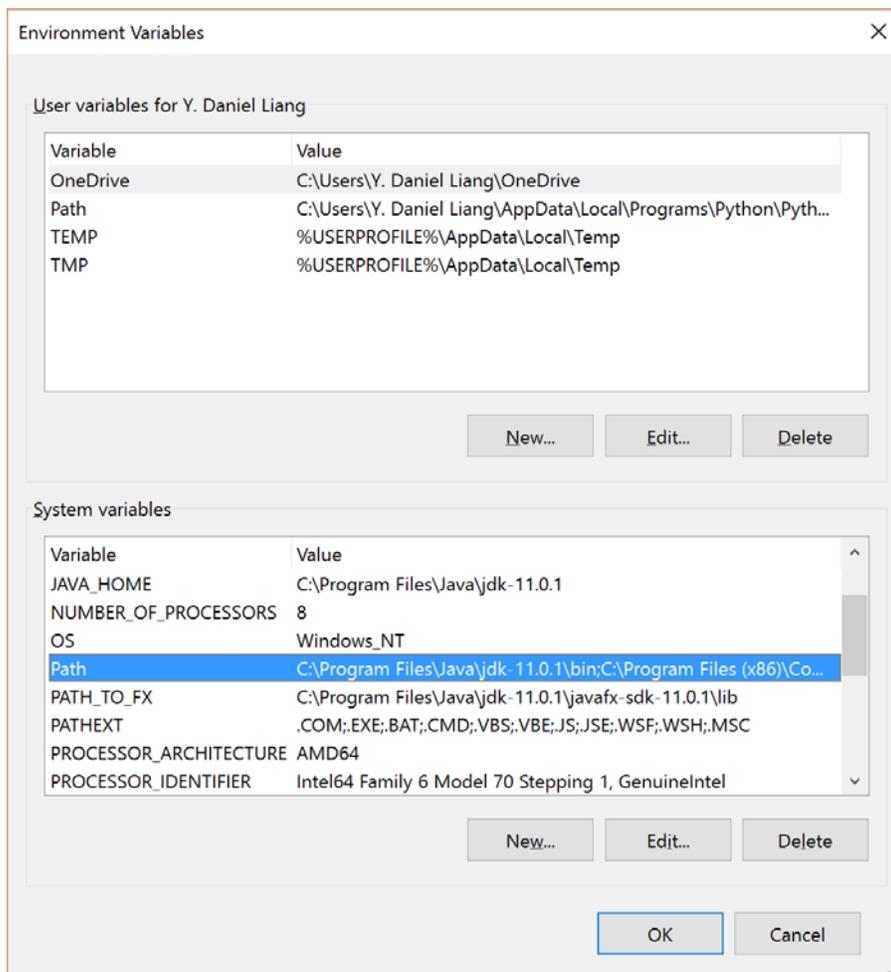


Figure 2

The Environment Variables window enables you to set user and system variables.

2. You can set or modify user variables or system variables. User variables affect the individual users and system variables affect all the users in the system. In the Systems variables section, select Path and click *Edit* if Path is already a user variable, as shown in Figure 3a. Otherwise, click *New* to display the New System Variable window as shown in Figure 3b.

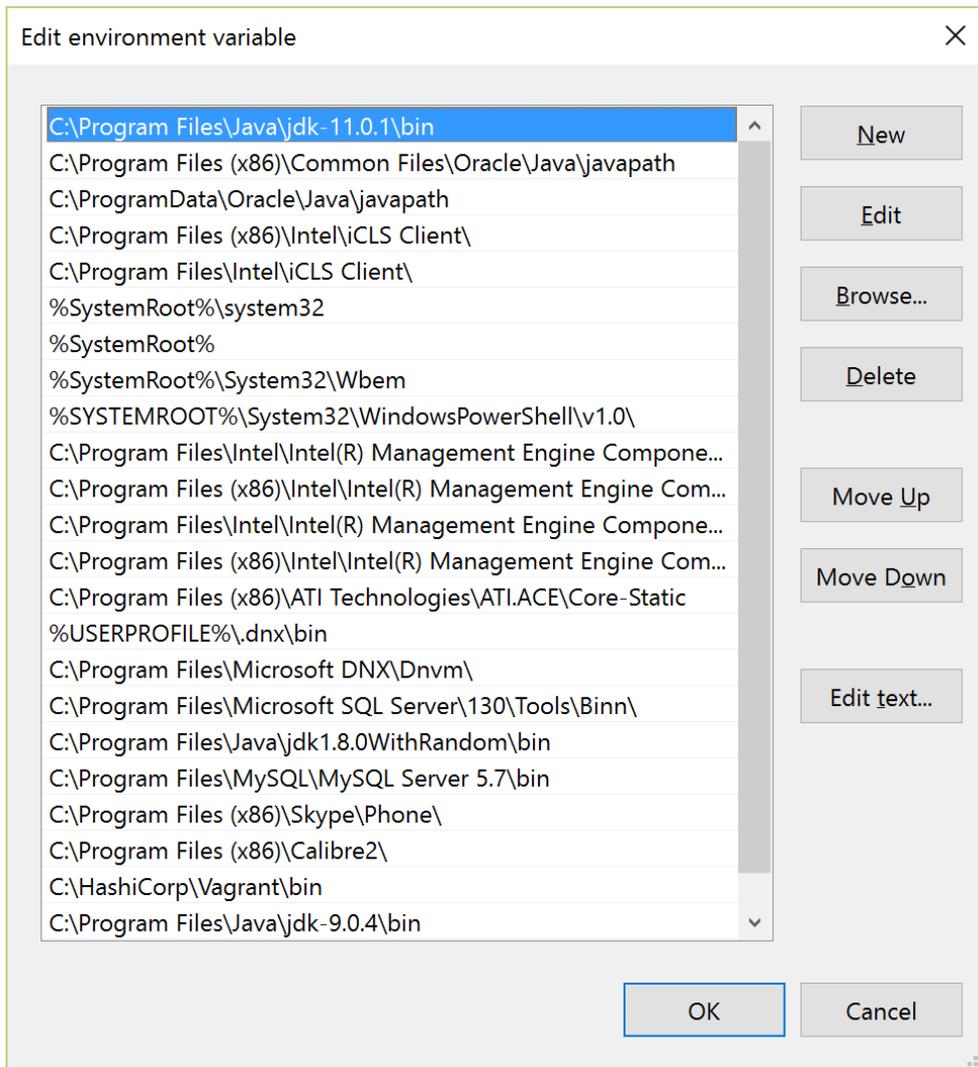


Figure 3a

You can add a new path in the Path variable.

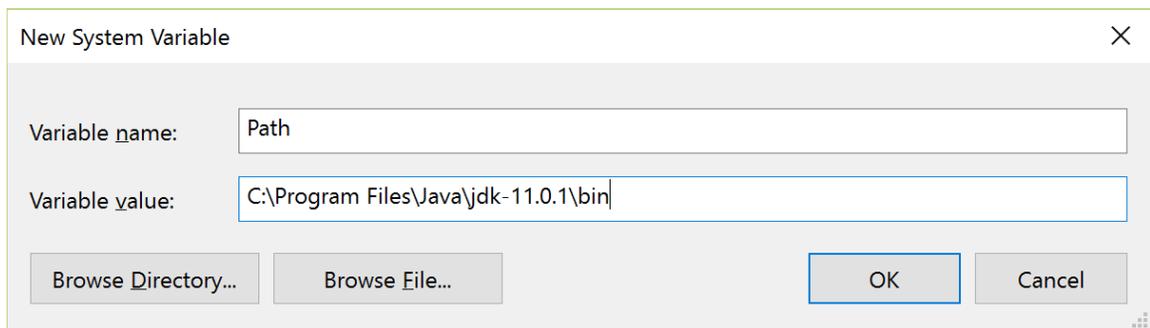


Figure 3b

The New System Variable enables you to set a new user variable and its value.

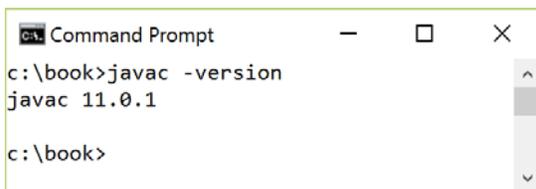
3. Type Path in the Variable field and c:\Program Files\Java\jdk-11.0.1\bin in the Variable Value field, as shown in Figure 3a or Figure 3b. Click *OK*.

NOTE: You don't have to reboot the computer, but you have to open a new command window to use JDK commands.

NOTE: If you download a new version or an update version, the directory name **jdk-11.0.1** may be slightly different.

1.4 Verifying Configurations

To verify whether JDK 11 is configured correctly, type **javac -version** from the command prompt, as shown in Figure 4. The **javac** command is not found if JDK is not properly configured.



```
Command Prompt
c:\book>javac -version
javac 11.0.1
c:\book>
```

Figure 4

*The **javac -version** command displays the version for javac.*