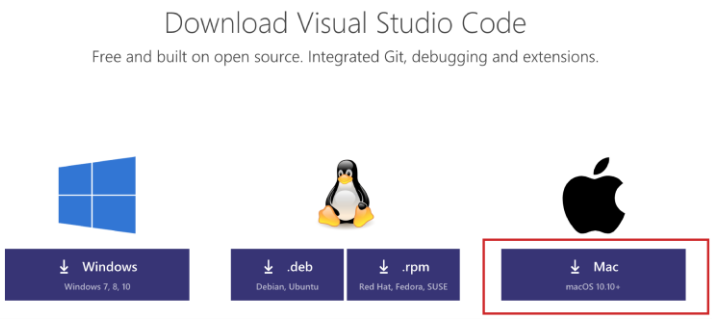
Mac Installation Guide for Microsoft Visual Studio Code (VS Code) - Java

Updated: 7/8/2020

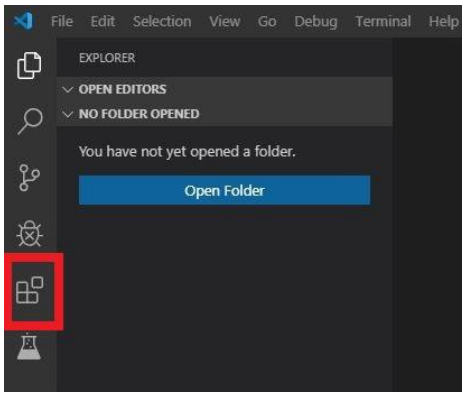
This document is intended for new Visual Studio Code (VS Code) and Java installations. If you already have VS Code installed and are upgrading to a new version of Java, please refer to the Java Upgrade Guide.

Procedure: Installation of Microsoft Visual Studio Code

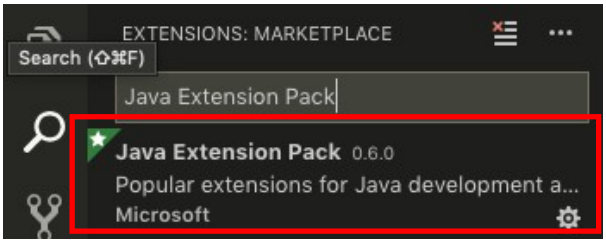
1. Navigate to the following website: https://code.visualstudio.com/download
2. Select the installer for your OS.



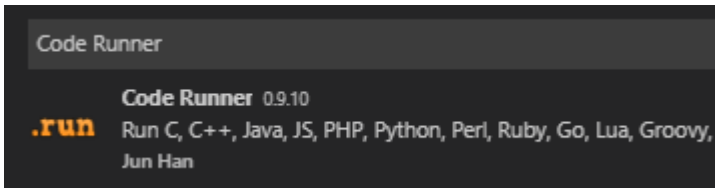
3. Once the file downloads, double-click the *zip* file to unpack it in the folder it is in.
4. Open the VS Code file.
5. Select the **Extensions** menu on the left.



6. In the search bar, search for "Java Extension Pack" and install the Java Extension Pack extension.



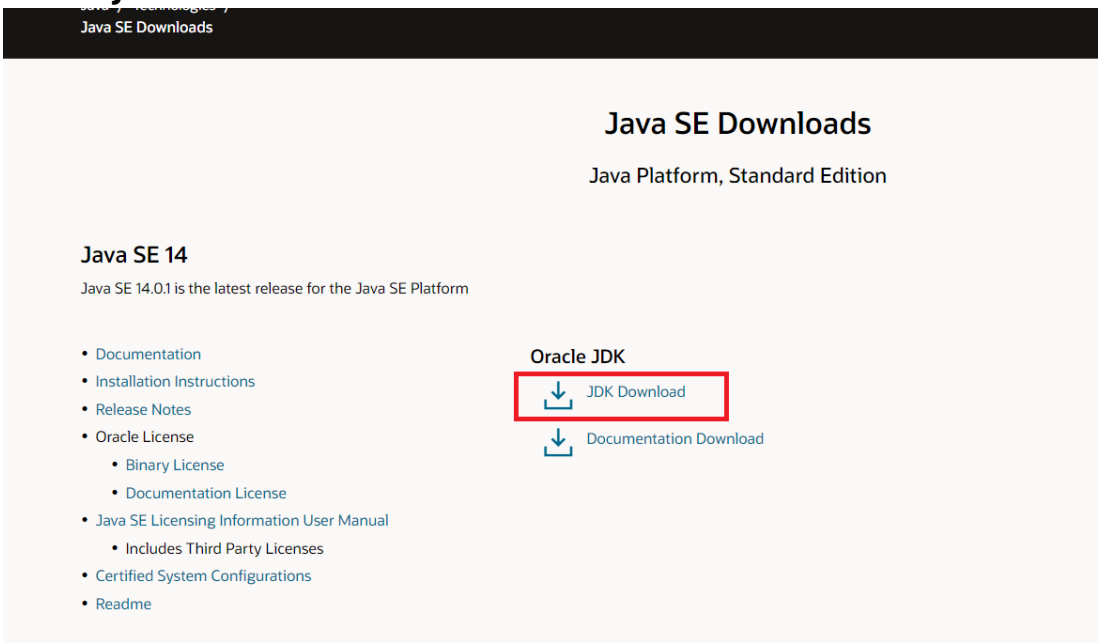
7. In the search bar, search for "Code Runner" and install the Code Runner extension. (The icon to the left may not show in the extension marketplace.)



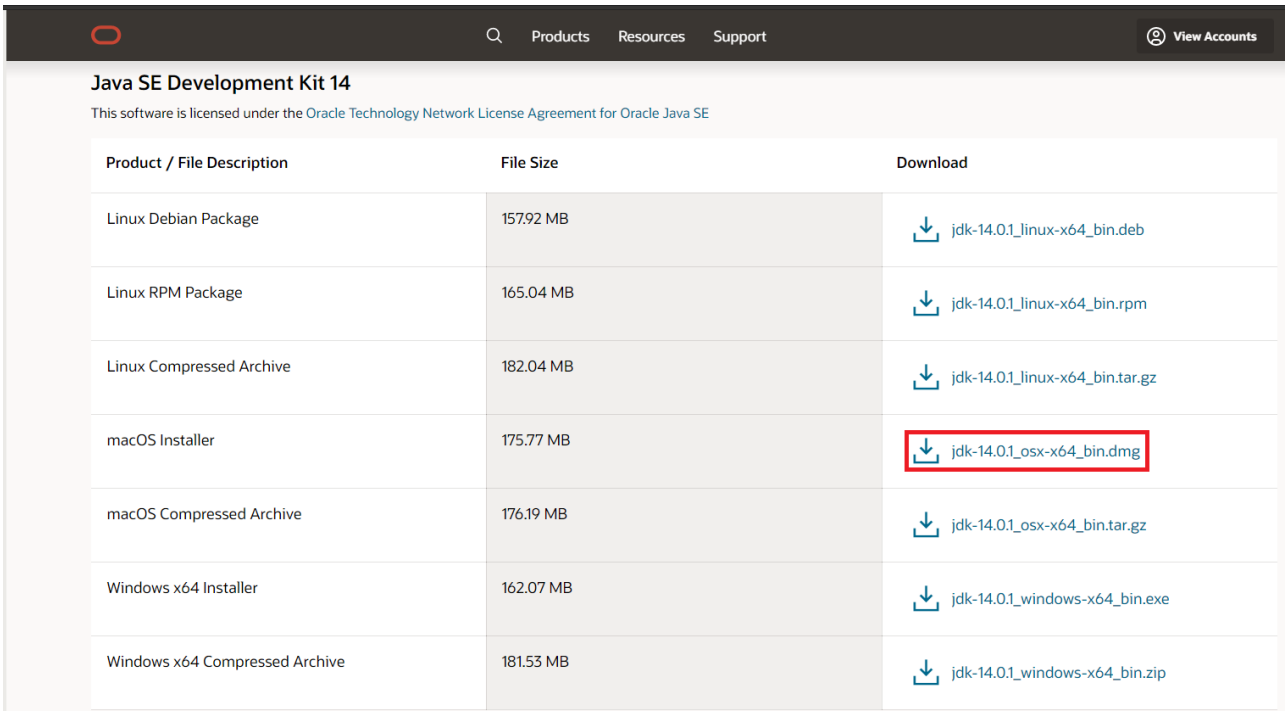
8. Quit VS Code.
9. Launch VS Code again.
10. Click the extensions icon again and verify the Java extension is installed.

Procedure: Installation of Java Development Kit 14

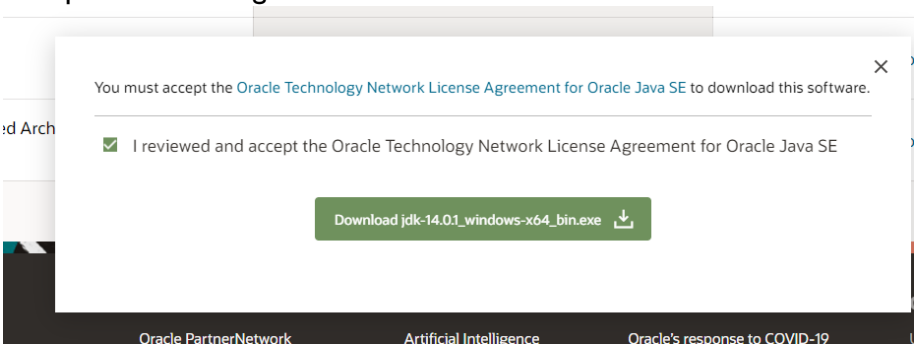
1. In a browser, navigate to https://www.oracle.com/java/technologies/javase-downloads.html.
2. Select the **JDK Download** link.



3. On the Java SE Development Kit 14 page, scroll down and select the JDK install file for the macOS Installer.



4. Accept the license agreement and select **Download…**



5. Once the download has finished, double-click to open the file. Follow the instructions in the installation wizard to install the JDK.
    a. If you need to install across multiple systems or other advanced features, use the installation instructions found here.

Procedure: Testing Your Installation by Running a Java File

1. Download the test files here.
2. Unzip the files to an easily accessible place.

3. In VS Code, open the test file *HelloWorld.java* file.
4. Right-click *HelloWorld.java* in the Explorer panel in VS Code and select **Open in Terminal**.
5. Type the following in the terminal and then press **enter**: `javac HelloWorld.java`
6. Type the following in the terminal and then press **enter**: `java HelloWorld`.
    a. *If you get a series of messages in red text, your system is not recognizing the path to the JDK. Otherwise continue.*
    b. *If it looks like your cursor is not showing in the terminal this is a known Microsoft error, simply begin typing and your text should appear.*
    c. You should see "Hello World!" appear in your terminal.

Procedure: Testing the Installation by Running a Scanner Test

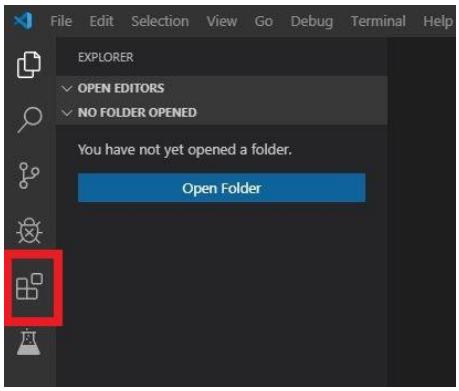
1. In your open terminal, type the following then press **enter**: `javac ScannerDemo1.java`
2. In your open terminal, type the following then press **enter**: `java ScannerDemo1`
    a. The cursor will hang, it is waiting for your input. Type your name and press **enter**.
    b. The output should be a message that says Name: <the name you typed>

Extensions: Disable Auto-complete of Java Code

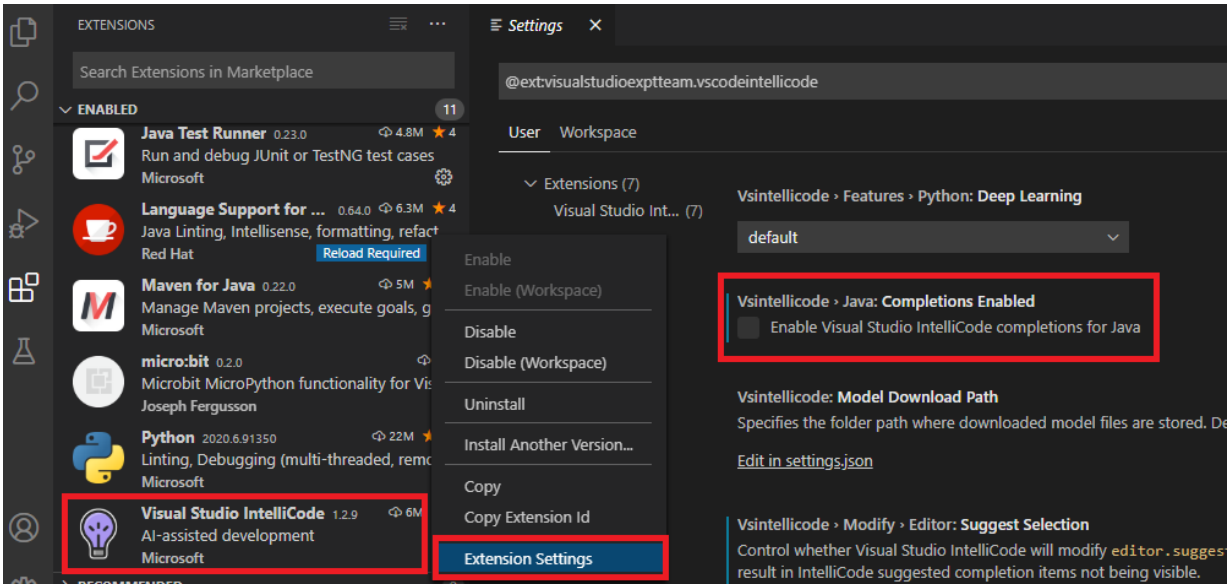
On the College Board CSA AP exam students will be expected to handwrite Java code on paper. Students will not have access to a code completion prompt or other intelligent typing systems found in many IDEs. Disabling these coding supports for Java will help students practice coding authentically to how they will be expected to show proficiency during the CSA AP exam.

If you install additional Java related extensions, you may need to adjust those as well. The guide below disables the Java code completion based on the extension presented in this install guide. These extensions may change some over time, but this provides guides for what needs to be disabled. After these are disabled, students will still see pop-ups when they are coding, but should not include any code prompts.

1. In VS Code, click to open the extensions panel.

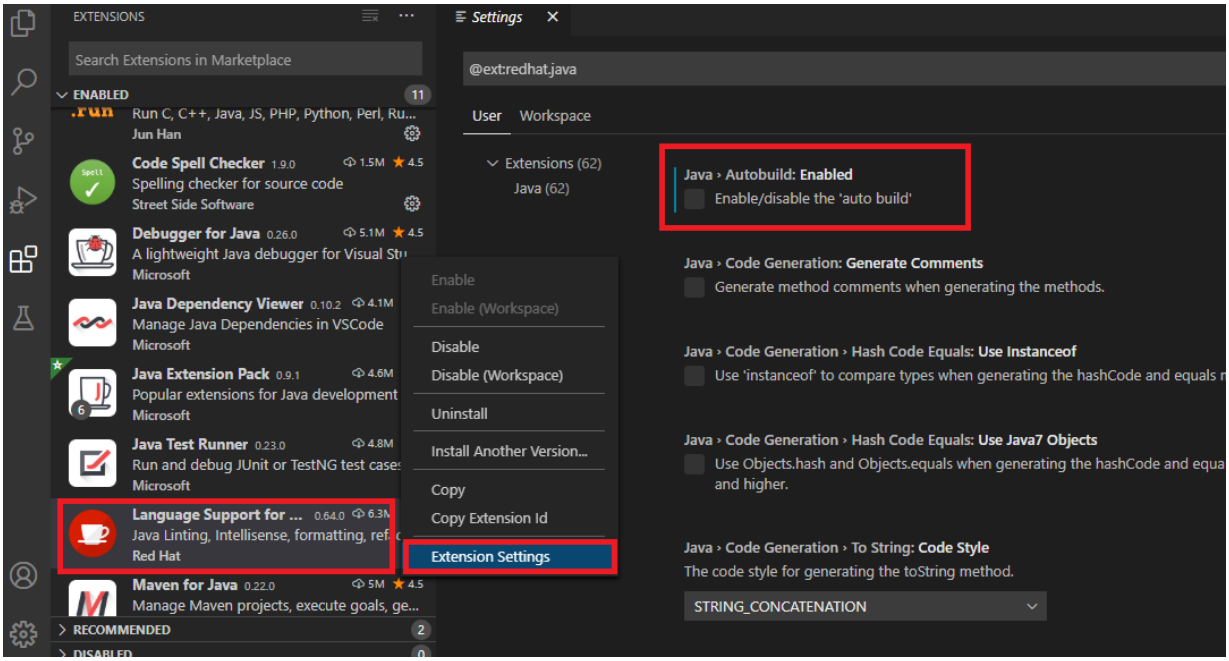


1. Scroll through the installed extensions until you find "Visual Studio Intellicode". Once you have located it, click on the **Manage** gear and select **Extensions Settings** in the context menu.



2. Uncheck the box for **Vsintellicode Java: Completions Enabled: Enable visual Studio IntelliCode** completions for Java.

3. Scroll through the installed extensions until you find "Language Support for Java by RedHat." Once you have located this click on it then click on the **Manage** gear and select **Extensions Settings** in the context menu.



4. Uncheck the box for Java Autobuild: Enabled, **Enable/disable the 'auto build'**.
5. Scroll down through the Language Support settings until you find Java: Completion: Enabled. Uncheck the box for **Enable/disable code completion support**.