This document will walk you through how to install a programmer's the Java Software Development Kit (JDK), and Git version control software on your personal machine.

The JDK contains the *compiler*, the program you will need to convert your source code into instructions the computer can execute. It also contains what is called the Java Runtime Environment (JRE). The JRE is used by Java programs as they are being executed by the computer. Follow the instructions below.

How to Install and Configure Your Programming Environment

If you are using a **Windows computer** then:

1. Click on the package name "Windows" from this link.
2. Unzip the downloaded file ("Windows.zip")
2. Double click on the installer " jdk-11.0.8_windows-x64_bin.exe" to start the installation.
3. Follow the installation wizard instructions
4. You will now need to set the class path and path environmental variables. (Your path variables tell your computer where to find programs and libraries when it needs to use them. By installing java, you've installed several programs and libraries that java will need to use when you compile the programs that you are going to write.)
    a) From the Start menu go to control panels
    b) Select System and Security
    c) Then select System
    d) Next go to Advanced System Settings
    e) Then select Environmental Variables
    f) Find the CLASSPATH variable in the list of **user** variables
    if you have a CLASSPATH variable then:
        I)   Edit the CLASSPATH and set it to be "path_to_jdk\lib\;."
                The "path_to_jdk" is location on your computer where your
                installed the Java Development Kit. For example if you
                installed the jdk to:

                C:\Program Files\Java\ jdk-11.0.8
                then you should set your CLASSPATH to:

                C:\Program Files\Java\jdk-11.0.8\lib\;.
                Where "**;.**" is a semicolon followed by a period.

        else if you do NOT have a CLASSPATH variable**:**
            I) Create a new environment variable named CLASSPATH
            II) Edit the CLASSPATH and set it to be "path_to_jdk\lib\;."
                    The "path_to_jdk" is location on your computer where your
                    installed the Java Development Kit. For example if you
                    installed the jdk to:
                    C:\Program Files\Java\ jdk-11.0.8
                    then you should set your CLASSPATH to:

C:\Program Files\Java\jdk-11.0.8\lib\;.
Where ";." is a semicolon followed by a period.

g) Find the PATH variable in the list of **system** variables

NOTE: The class path will be a semi-colon separated list of directory paths, when editing the PATH variable **DO NOT delete or change anything that is already there.**

I) Edit the PATH by **adding** to the end of the list of paths the path to the JDK's bin folder, on most systems this will be: C:\Program Files\Java\jdk-11.0.8\bin
Make sure you use the location to where you installed the JDK on your machine.

h) Save the changes.

Next install **Git Bash** on your system. This will install both the Git software and a replacement for the Command Prompt.
1. Double click on the installer " Git-2.28.0-64-bit.exe" to start the installation.
2. Follow the installation wizard instructions

Else If you are using a **Mac computer** then:

1. Click on the package name "Mac" from this link.
2. Unzip the downloaded file ("Mac.zip")
3. Double click on executable filename "jdk-11.0.8_osx-x64_bin.dmg" to start the installation.
4. Follow the installation wizard instructions

Next install **Git**
ss
1. Open your web browser.
2. Go to https://git-scm.com/downloads
3. Follow the link for Mac OS X.
4. Download the installer.
5. After the installer has finished downloading, double-click on the installer.
6. Follow any and all directions that follow.

Else you need to speak with the instructor.