Computer setup guide

For this class you will need to install a few programs on your computer.

First make a new folder in your Documents. Call the new folder Bioinformatics or Bioinformatics_class or something similar where you will keep your files for the activities in the rest of this class. Inside that folder, make another new folder called Programs.

Program 1: Jalview https://www.jalview.org/

Click on the large green arrow to go the Download page

Select the correct version for your Operating System (OS)

Click on the downloaded file to install the program

Follow the directions in the installer window

When the installation is complete, click on the Desktop icon to launch the program. If it looks like this, you are all good. If not we have to troubleshoot.
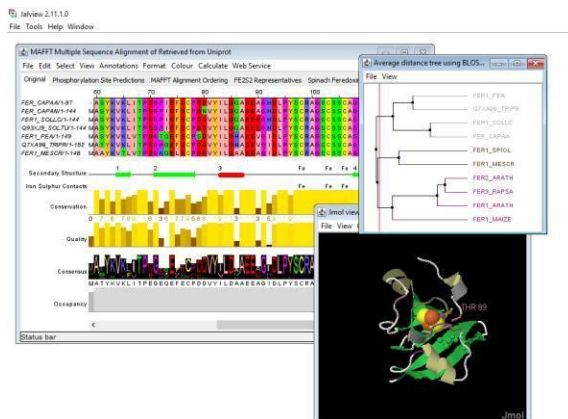
Program 2: AliView AliView (https://ormbunkar.se/aliview/#DOWNLOAD)

Scroll down to Install instructions and Downloads:
Select the version that matches your operating system (Mac, Windows, or Linux).

Example: How to install AliView for Windows:

1. Click on Windows (all version) download here

Windows (all versions) download here

Download and run **AliView-Setup.exe**
- the setup program will default installation to directory "C:\Program Files (x86)\AliView"

Alternatively you can download the program **AliView.exe** or **aliview.jar** from sub-directory /without_installer_version/

NOTE: some virus scanners might block the installation and need to be temporarily disabled.

2. Click on windows/

← → C   🔒 ormbunkar.se/aliview/downloads/

Index of /aliview/downloads

Name	Last modified	Size	Description
Parent Directory		-	
linux/	2014-04-02 18:18	-	
mac/	2014-04-02 18:18	-	
windows/	2014-04-02 18:18	-	

3. Click on windows-version-1.26/

Name	Last modified	Size	Description
Parent Directory		-	
beta/	2019-04-07 17:10	-	
older/	2019-04-07 22:34	-	
windows-version-1.26/	2019-04-08 07:25	-	

4. Click on AliView-Setup.exe

Name	Last modified	Size	Description
Parent Directory		-	
AliView-Setup.exe	2019-04-08 07:25	2.4M	
install.readme.txt	2019-04-08 07:25	403	
without_installer_version/	2019-04-08 07:25	-	

5. When AliView-Setup.exe has downloaded, click on it and follow the instructions on your screen to install it. (just click next, install, and finish, no need to check any boxes)

6. The program should open up and look like this:

Program 3: FigTree

Go to https://github.com/rambaut/figtree/releases
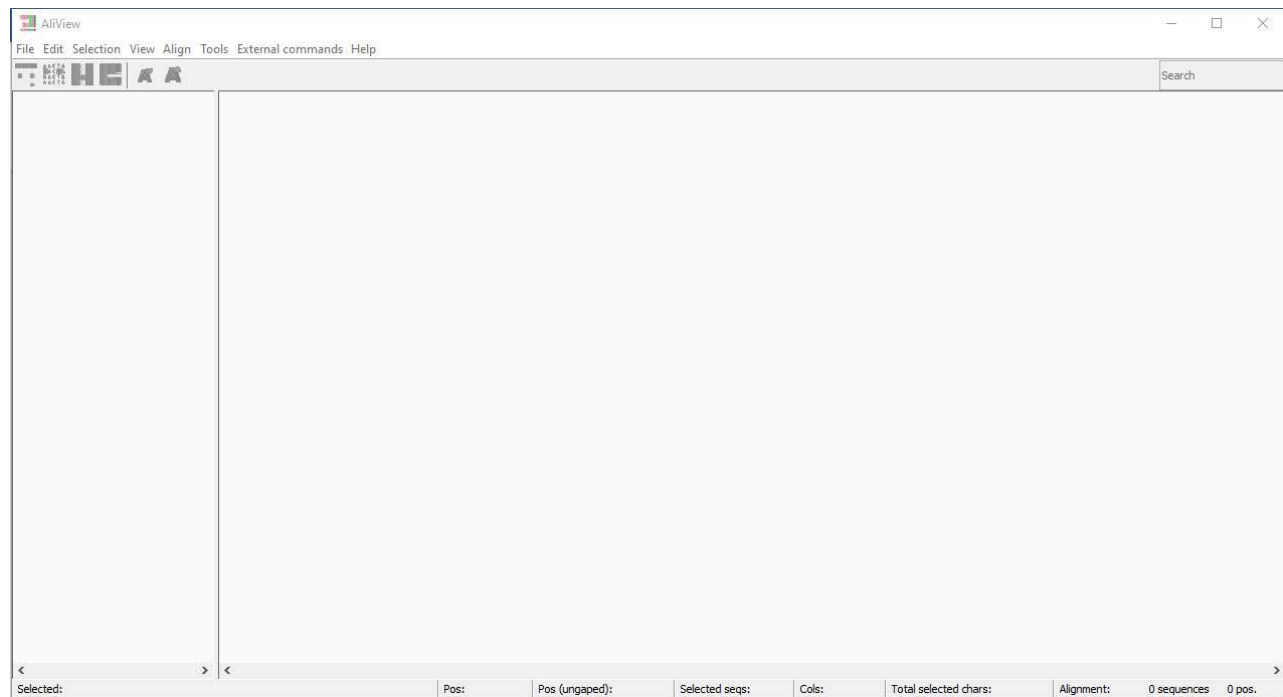
Or for Mac: FigTree.v1.4.4.dmg

For Windows: FigTree.v1.4.4.zip

This will download a zipped folder. Copy the folder and place it in your new folder called Programs (in Bioinformatics_class). Extract the folder into a folder with the same name, e.g. if the zipped folder is FigTree.v1.4.4.zip extract its content into another folder called FigTree.v1.4.4

Enter the unzipped folder and click on the blue application icon.

Does something like this open up?
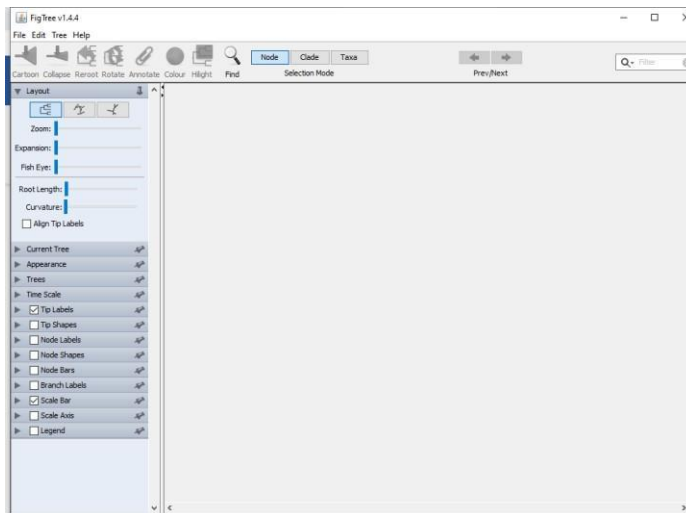
If it does not, make sure that 1) the zip file is extracted and 2) that Java is up to date.

Program 4: PyMOL
DOWNLOAD URL: https://pymol.org/ep/
USERNAME: jun2021
PASSWORD: betabarrel

Download the license file and PyMOL for your OS.

Install by accepting the suggested settings.

Copy the license file to your Bioinformatics_class/Programs folder.

After installing PyMOL, launch it.

When PyMOL asks for the license file, browse and select the

license file. Then type in the following command in the box that

says PyMOL> :

fetch 1phz

followed by enter

if this opens a protein in the PyMOL viewer, you are done. Can you use the mouse to move the protein on the screen? If not we have to troubleshoot.

Program 5: Anaconda https://www.anaconda.com/products/individual
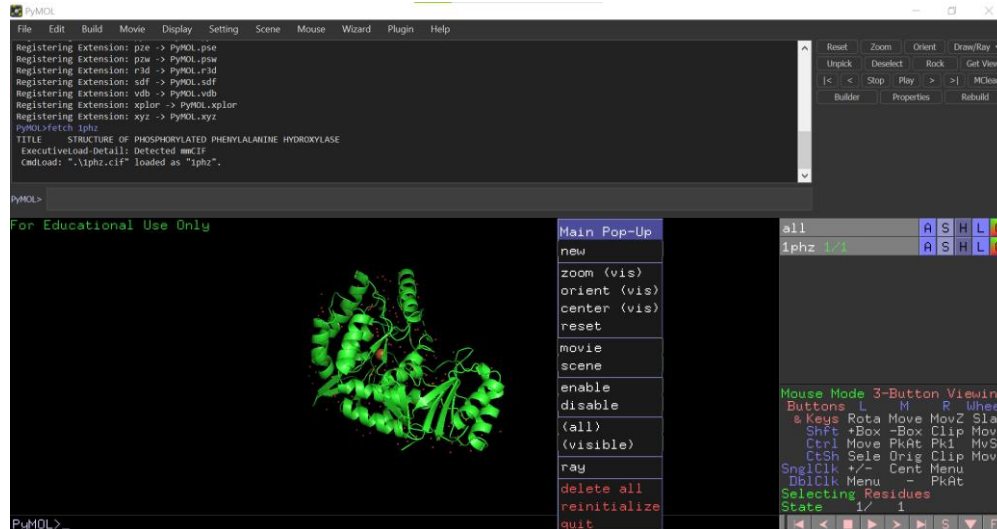
Scroll down to Anaconda installers, pick the best Graphical installer for your OS with Python 3.7.
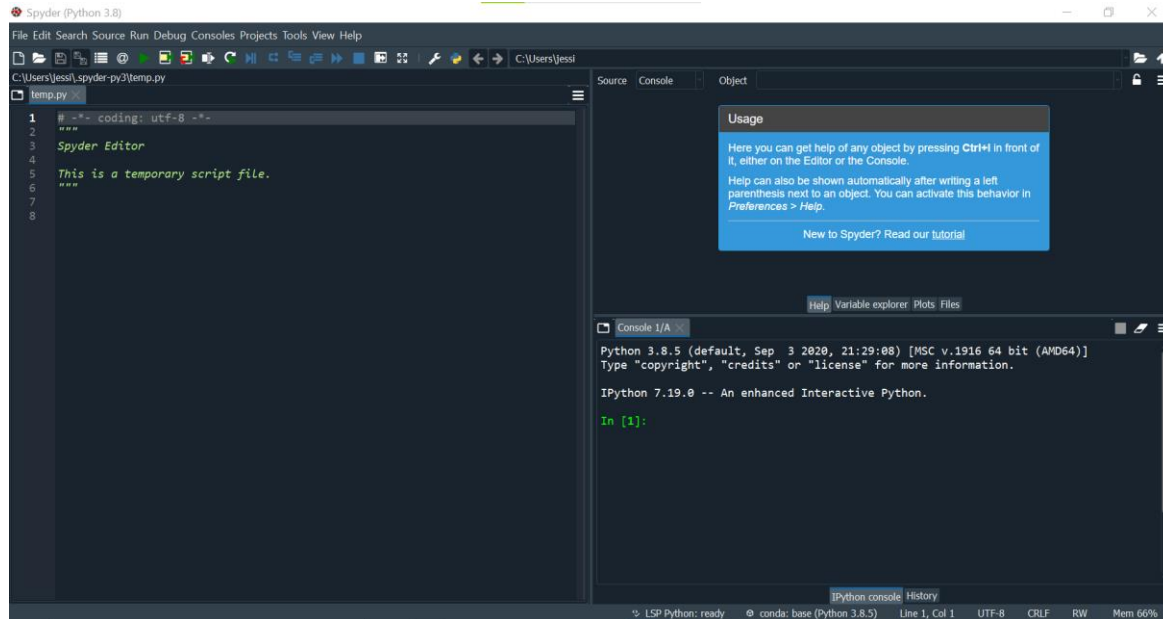
Download the file

Click on the file when it has been completely downloaded

Follow the instructions (use the suggested settings) to install Anaconda

Ignore Kite

Click on Spyder (anaconda3)

It should look like this

Program 6: Install a TextEditor

You also need to have access to a plain text editor. *In TextEdit and WordPad, you need to make sure that your files are* *saved as plain text**. If it saves as RTF (rich text format) there will be additional characters in the text file that we cannot see but that will confuse other programs so they will not run.* Thus, we will use a different text editor for the lab.

On MacBooks, please use BBEdit as your main text editor for bioinformatics for this class. You can install BBEdit from https://apps.apple.com/us/app/bbedit/id404009241?mt=12 BBEdit only works on Mac.

On Windows, please use NotePad++ as your main text editor for bioinformatics for this class. You can install NotePad++ from https://notepad-plus-plus.org/downloads/v7.8.6/

NotePad++ only works on Windows and you have to be administrator or know the administrator password to install this program. When installed, launch it. If it looks like this, you have successfully installed the program. Reach out if you need help.

If you use TextEdit and WordPad, you need to make sure that your files are saved as plain text. If it saves as RTF (rich text format) there will be additional characters in the text file that we cannot see but that will confuse other programs.

Program 7: Mendeley

You will need a reference manager for the research part of the class. We recommend Mendeley: https://www.mendeley.com/download-desktop-new/

You also need to install a Web importer (on the same page) that allows you to easily save your references from e.g. PubMed or a journal.

Lastly, the citation plugin (on the same page) adds to Word and with this you can easily keep track of your references and change the format of them in just a few clicks. If you haven't used a reference manager before, this is a game changer!

All done!