QWorld Quantum Summer School 2021
Installation instructions

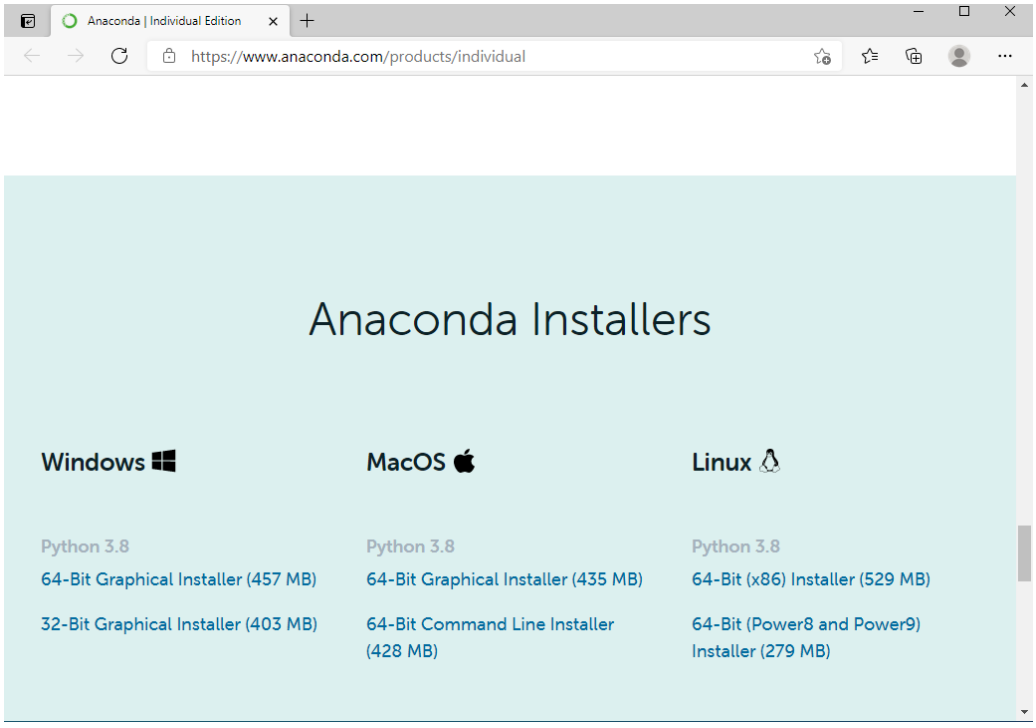
You will need to install *Jupyter Notebook* to read and run the material that will be used in the workshop. If you are an expert, you can skip some or all of the sections below.

Installation of *Jupyter Notebook*

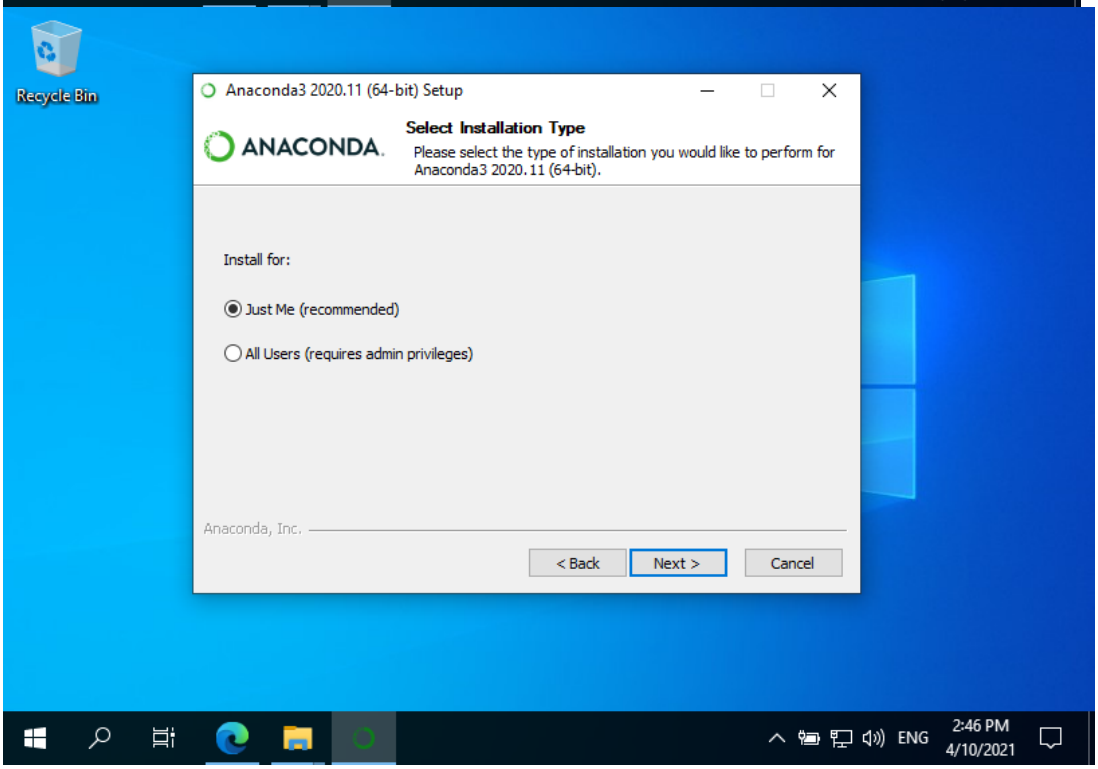
We recommend using *Anaconda* to install *Jupyter Notebook*.

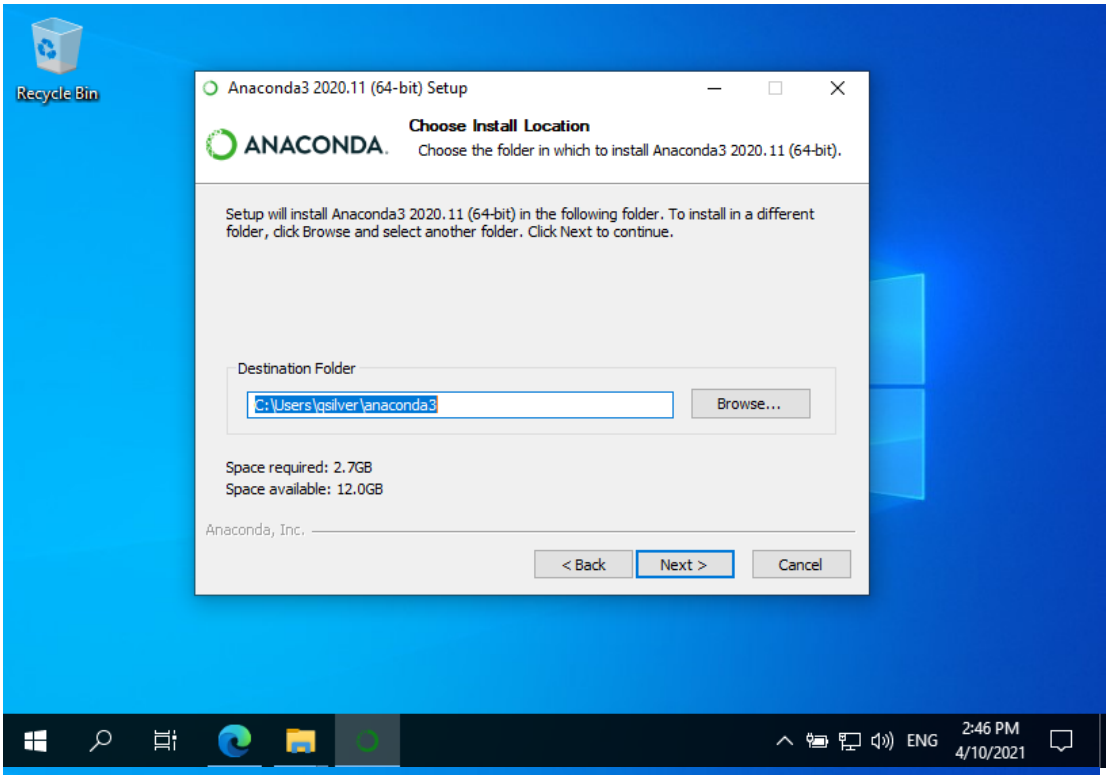
Installing *Anaconda*

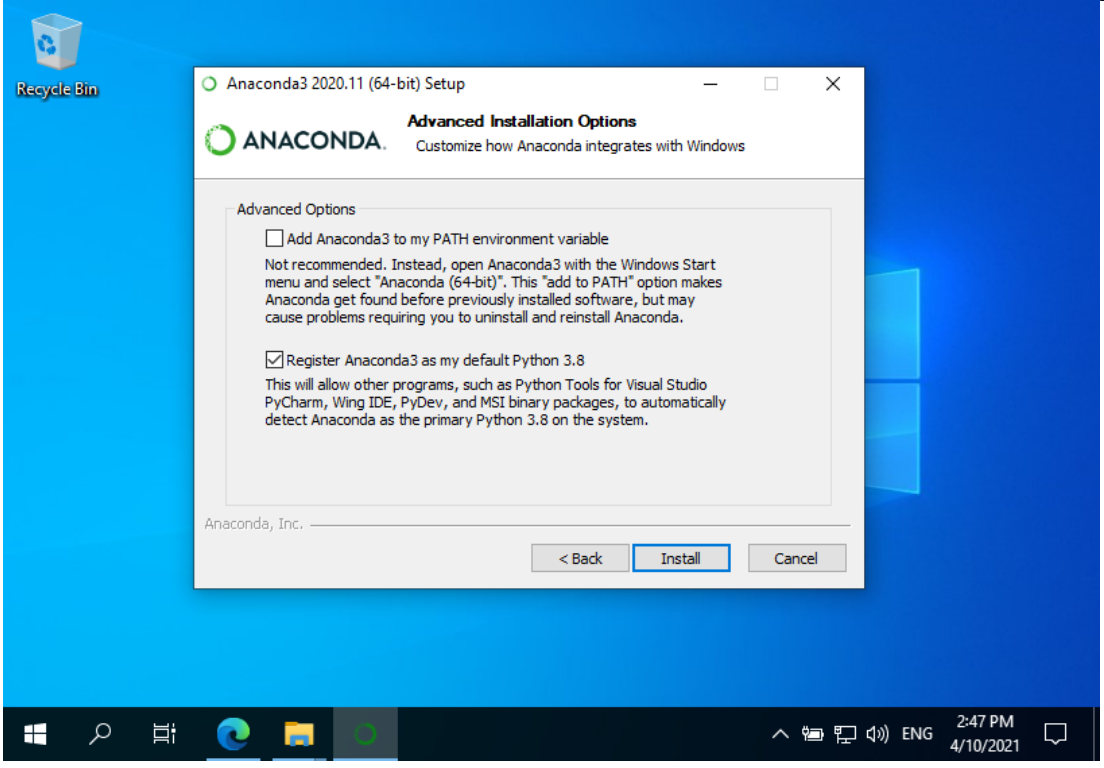
1. Anaconda is available for multiple platforms. [You can download it here](#).

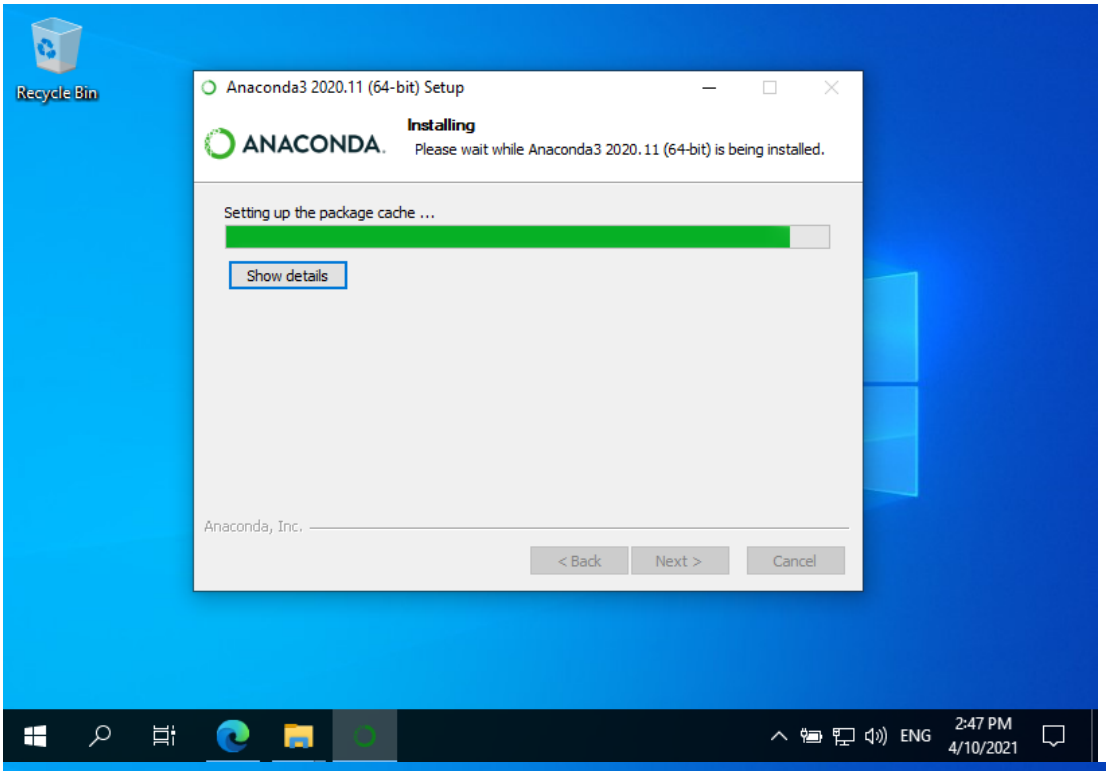


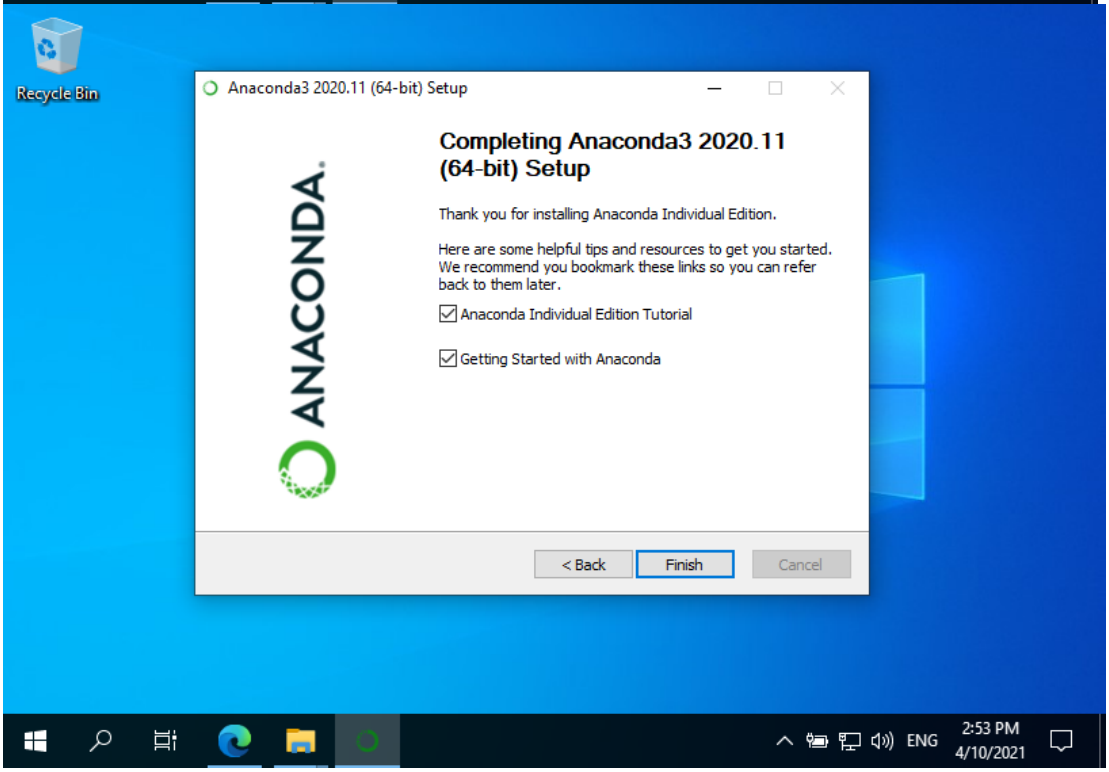
2. You can use the default installation settings. On Windows they'll look like this:




Recycle Bin
Anaconda3 2020.11 (64-bit) Setup
ANACONDA.
Choose Install Location
Choose the folder in which to install Anaconda3 2020.11 (64-bit).
Setup will install Anaconda3 2020.11 (64-bit) in the following folder. To install in a different folder, click Browse and select another folder. Click Next to continue.
Destination Folder
C:\Users\qsilver\anaconda3
Browse...
Space required: 2.7GB
Space available: 12.0GB
Anaconda, Inc.
< Back
Next >
Cancel
ENG
2:46 PM
4/10/2021

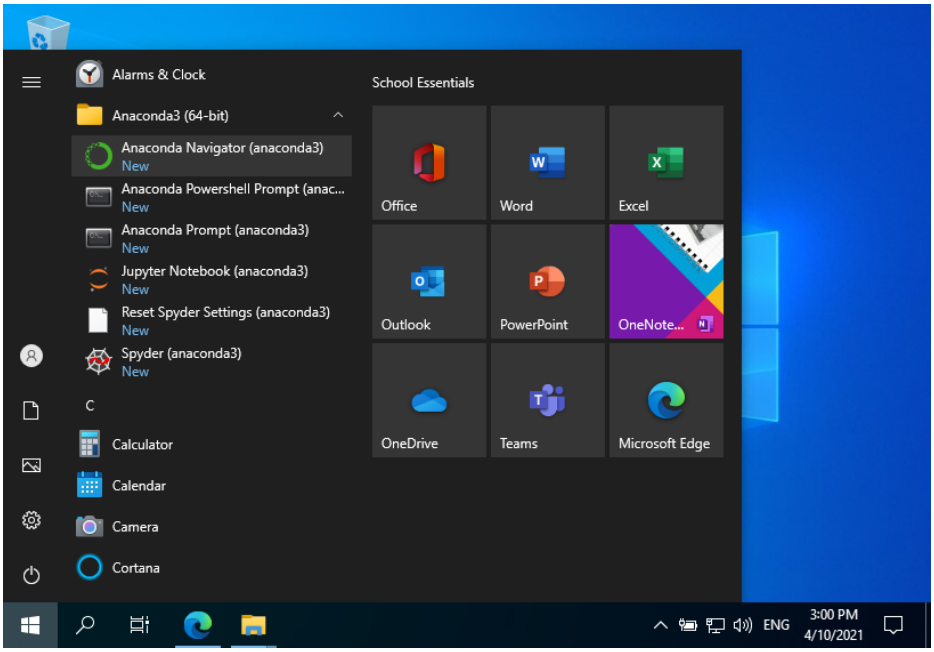

Recycle Bin
Anaconda3 2020.11 (64-bit) Setup
ANACONDA.
Advanced Installation Options
Customize how Anaconda integrates with Windows
Advanced Options
Add Anaconda3 to my PATH environment variable
Not recommended. Instead, open Anaconda3 with the Windows Start menu and select "Anaconda (64-bit)". This "add to PATH" option makes Anaconda get found before previously installed software, but may cause problems requiring you to uninstall and reinstall Anaconda.
Register Anaconda3 as my default Python 3.8
This will allow other programs, such as Python Tools for Visual Studio PyCharm, Wing IDE, PyDev, and MSI binary packages, to automatically detect Anaconda as the primary Python 3.8 on the system.
Anaconda, Inc.
< Back
Install
Cancel
ENG
2:47 PM
4/10/2021


Recycle Bin
Anaconda3 2020.11 (64-bit) Setup
ANACONDA.
Installing
Please wait while Anaconda3 2020.11 (64-bit) is being installed.
Setting up the package cache ...
Show details
Anaconda, Inc.
< Back
Next >
Cancel
ENG
2:47 PM
4/10/2021

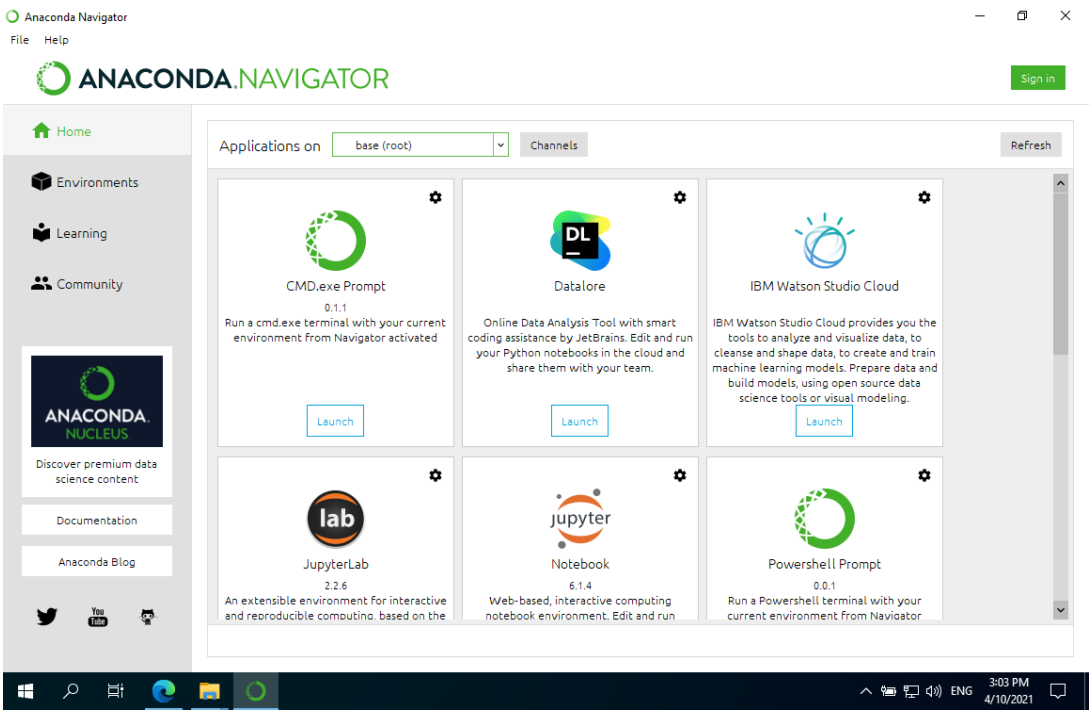

Recycle Bin
Anaconda3 2020.11 (64-bit) Setup
ANACONDA.
Completing Anaconda3 2020.11 (64-bit) Setup
Thank you for installing Anaconda Individual Edition.
Here are some helpful tips and resources to get you started. We recommend you bookmark these links so you can refer back to them later.
Anaconda Individual Edition Tutorial
Getting Started with Anaconda
< Back
Finish
Cancel
ENG
2:53 PM
4/10/2021

Creating the virtual environment “QWorld”

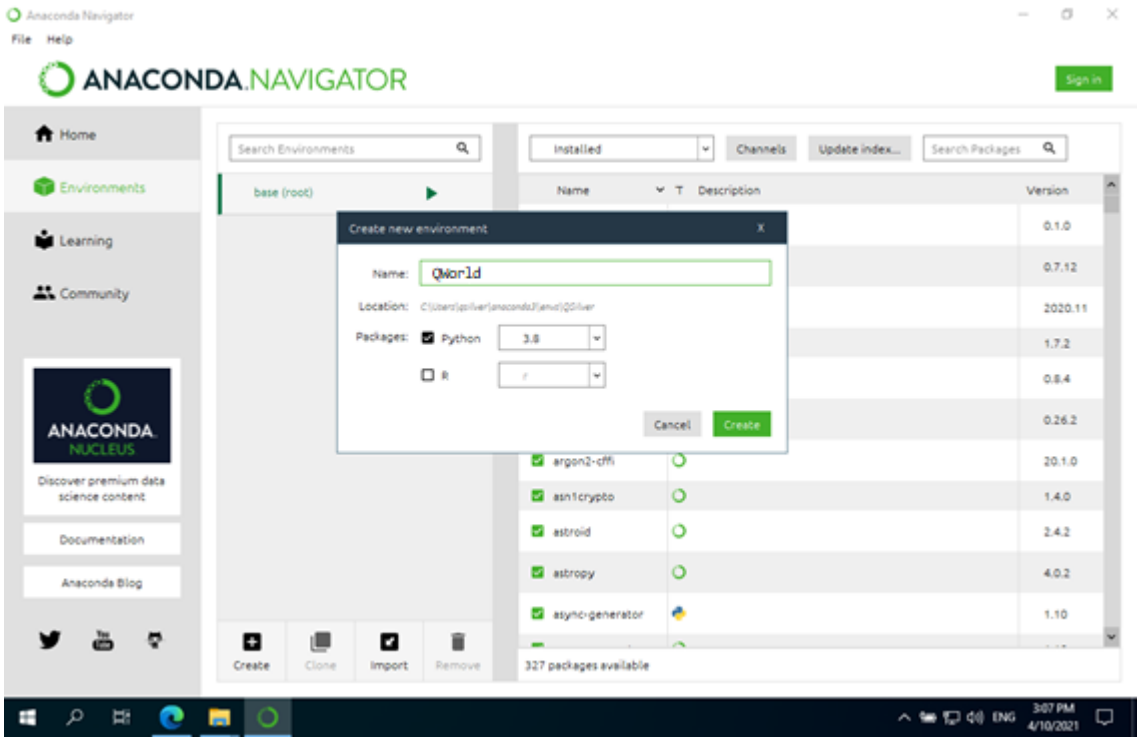
1. Start the *Anaconda Navigator*. In Windows you can find it in the Start Menu:



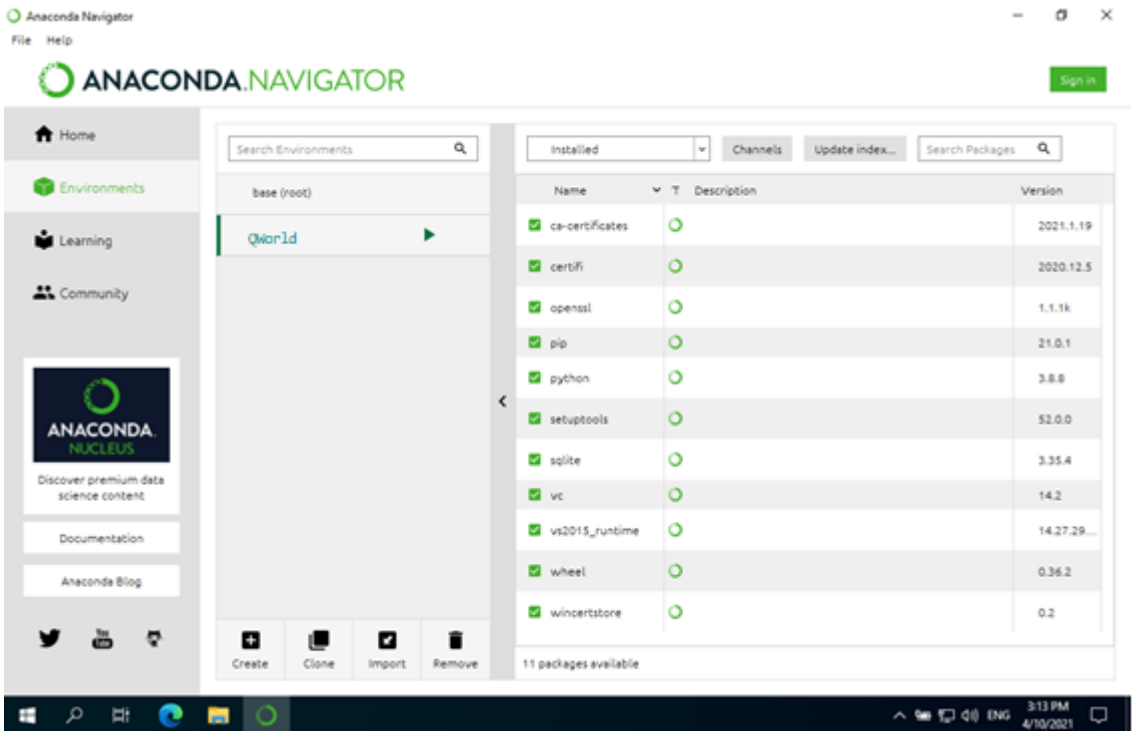
2. Once started, *Anaconda Navigator* will show its *Home* tab.



3. Select the *Environments* tab on the left. And click on the *Create* button on the bottom. Fill in “QWorld” in the environment name and click *Create*.

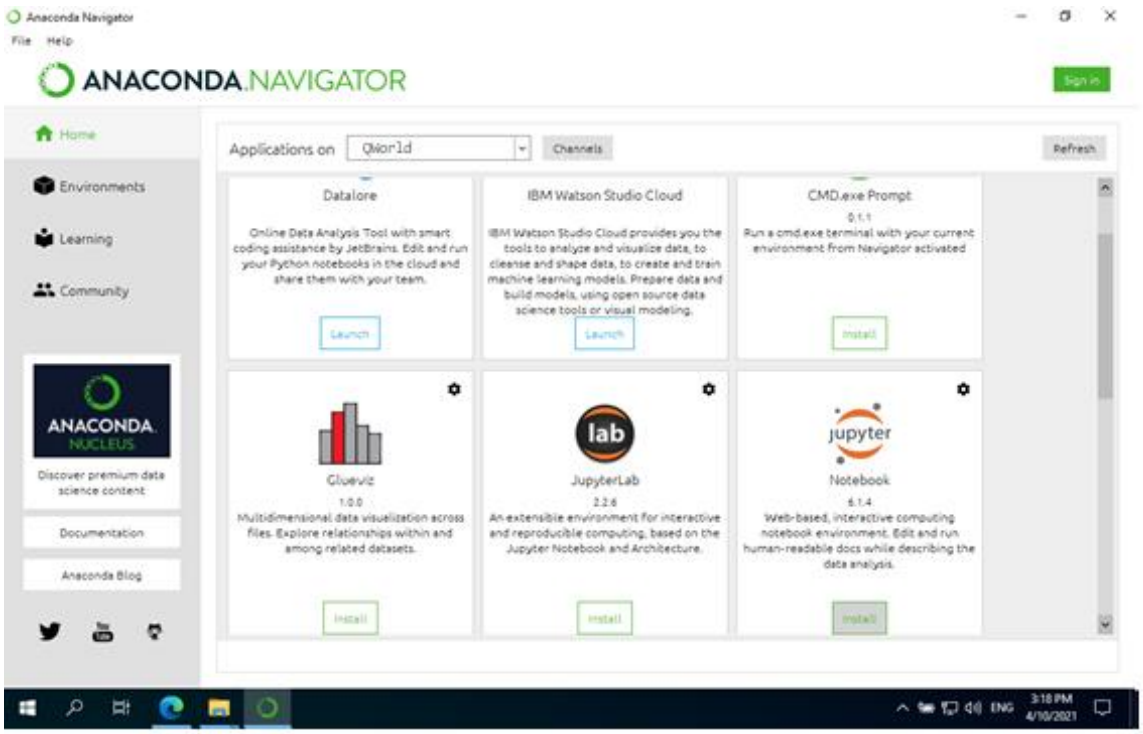


It’ll take a while until the creation is completed. Once ready, you’ll see a new environment “QWorld” in the middle pane of *Anaconda Navigator*:



Installing *Jupyter Notebook* in the "QWorld" environment

1. Go back to the *Home* tab. Make sure that "QWorld" is selected in the drop-down menu where it says "Applications on." If everything looks OK, click the *Install* button on the *Jupyter Notebook* card.

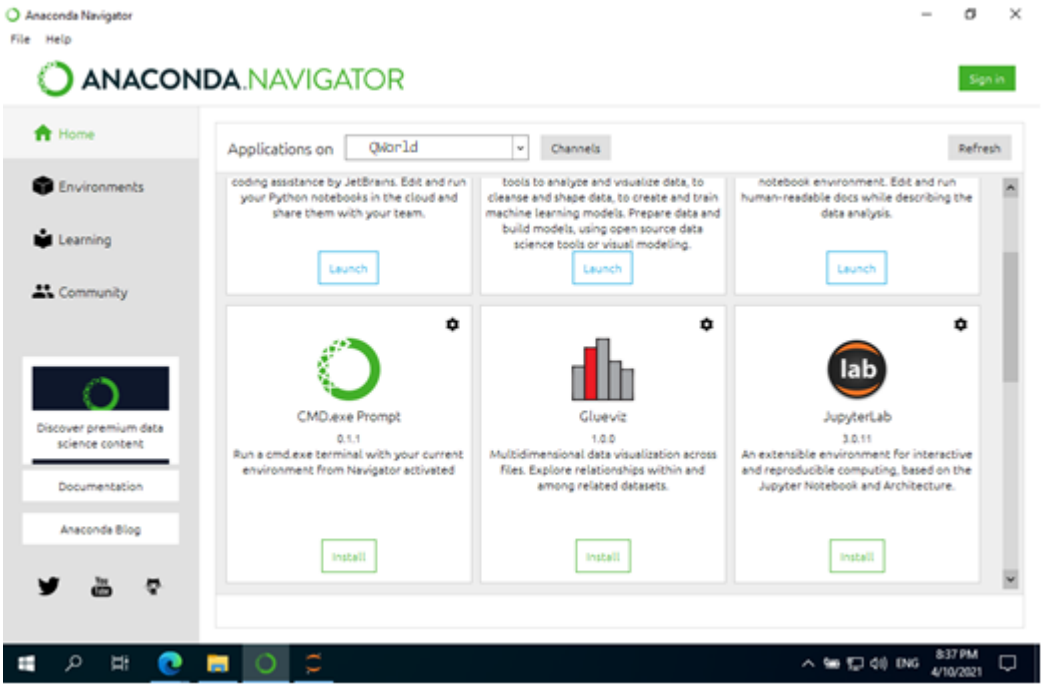


It will take a while to complete the installation.

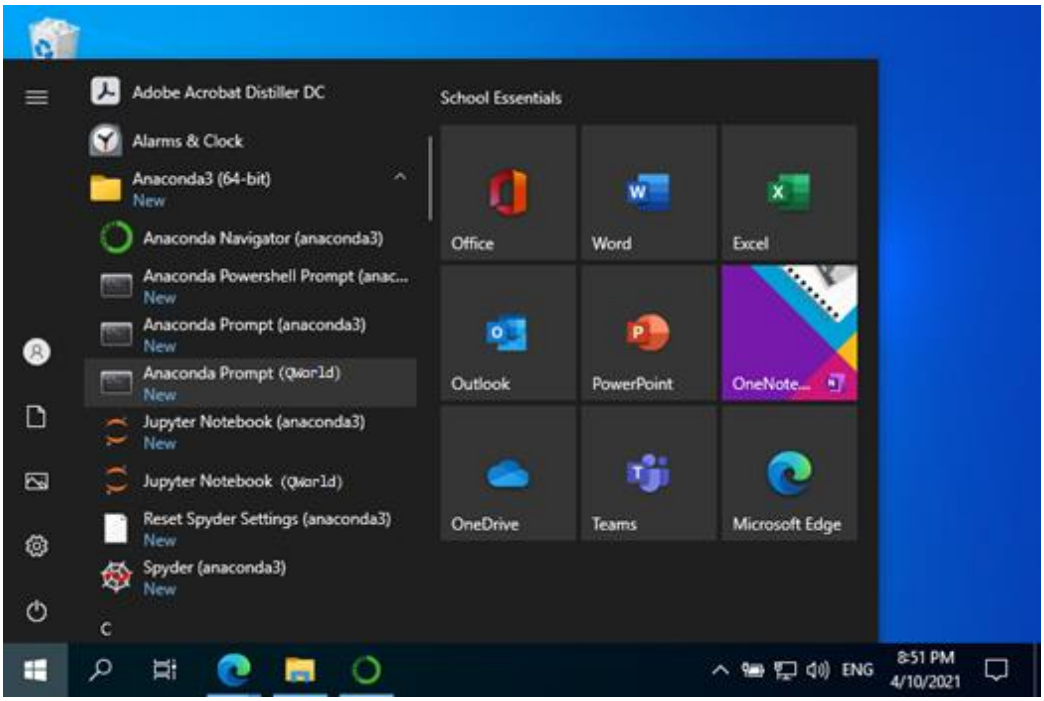
Enabling the *Anaconda Terminal* in the "QWorld" environment (optional)

You should be able to install all dependencies and use the materials from *Jupyter Notebook* alone, however, you might find it useful to have means to manage the "QWorld" virtual environment from the command line.

1. Select the *Home* tab, make sure that the "QWorld" environment is selected in the drop-down menu on the top. Find the card "*CMD.exe Prompt*" and click "*Install*:"



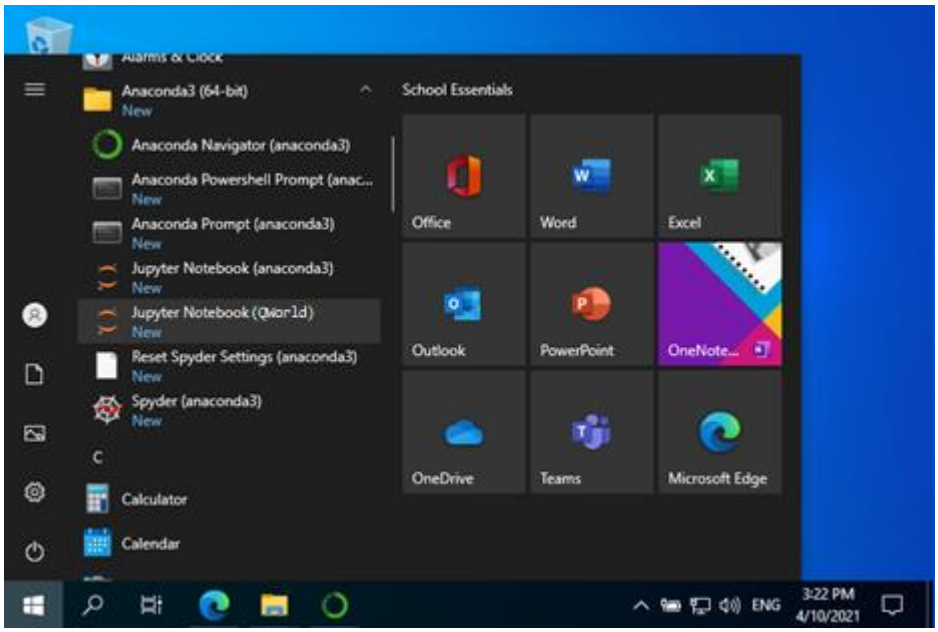
After this a new menu item, *Anaconda Prompt (QWorld)* will be available in the *Anaconda3* folder in the Start Menu:



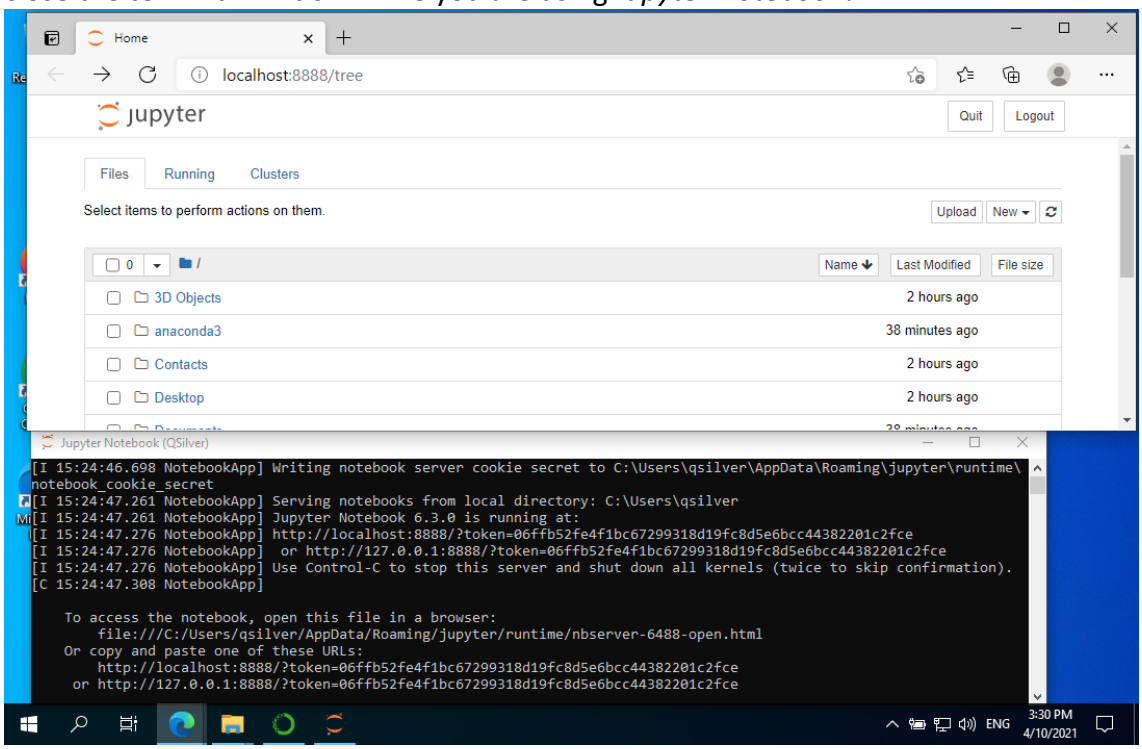
Starting *Jupyter Notebook*

We recommend starting Jupyter Notebook in a separate virtual environment named "QWorld."

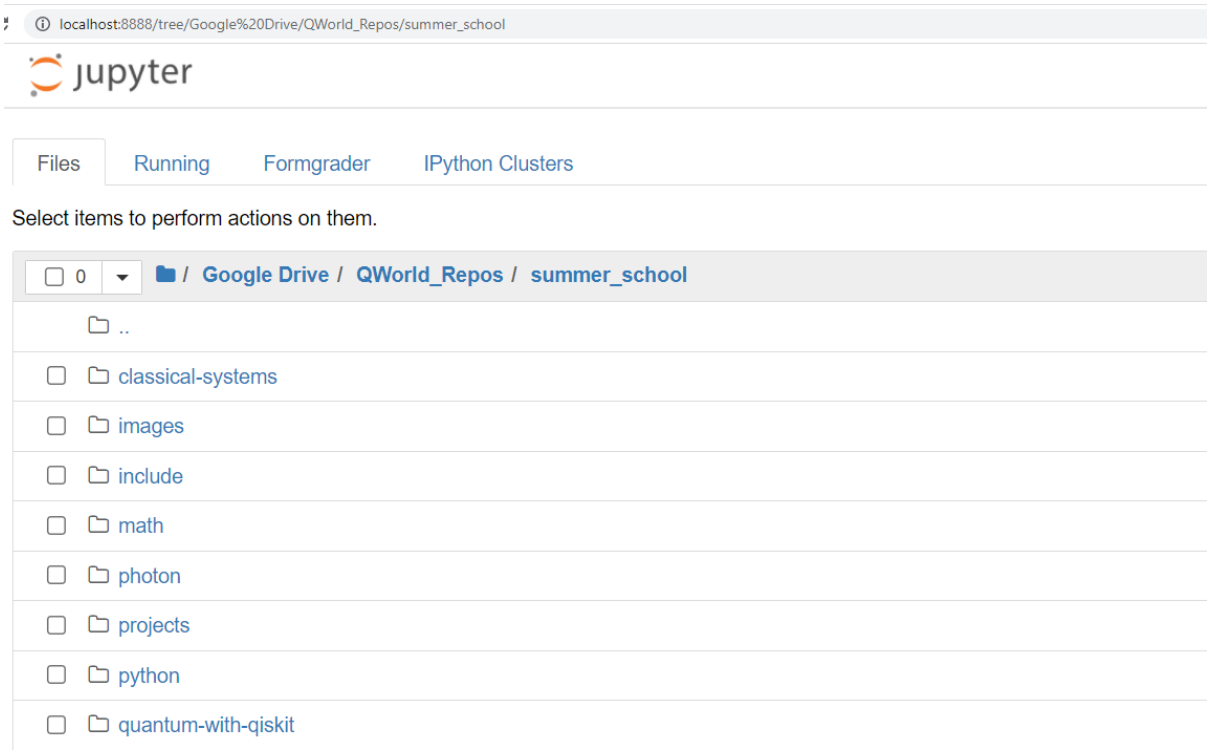
1. If you followed the instructions above, a new item "Jupyter Notebook (QWorld)" will be available in Start Menu under the *Anaconda3* folder:



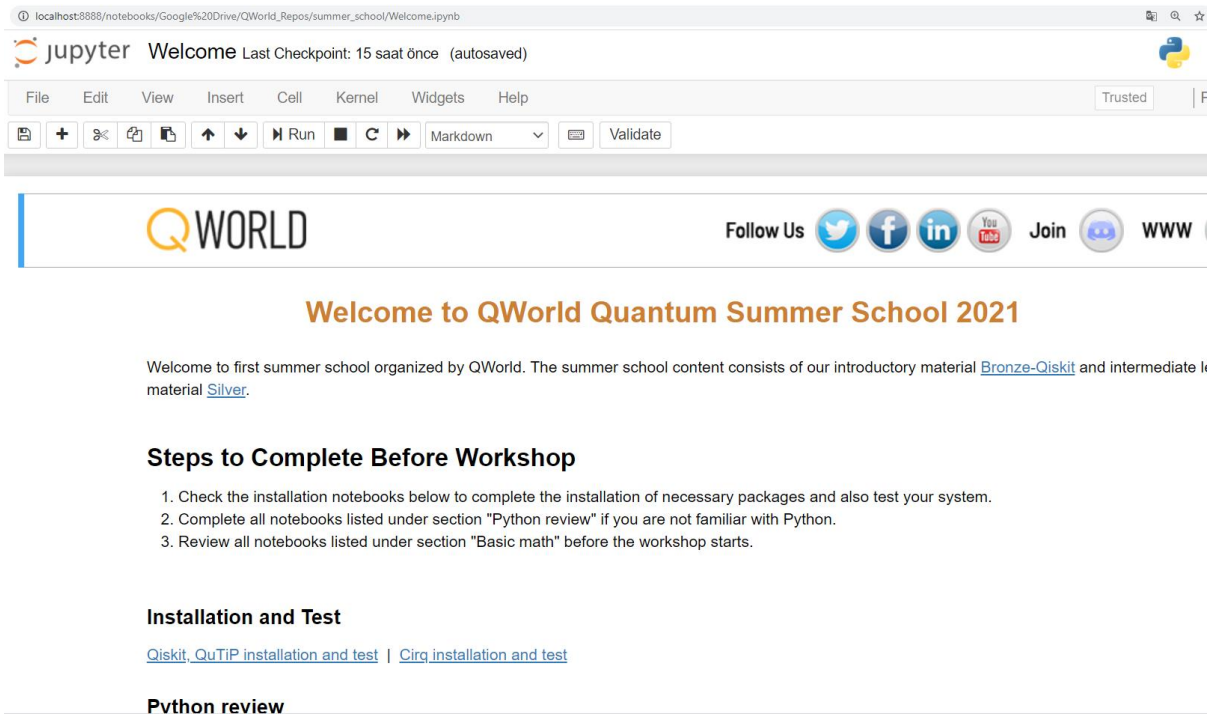
2. Once you click in this item, the *Jupyter Notebook* server will be running in a terminal window, and your browser will be instructed to open the graphical interface. Do not close the terminal window while you are using *Jupyter Notebook*!



3. Navigate to the folder where you have downloaded the materials to:



4. Open the file “welcome.ipynb”



Now you should be ready to proceed with installing the required python libraries!