



# Installing the Python Environment

Jorge Peña

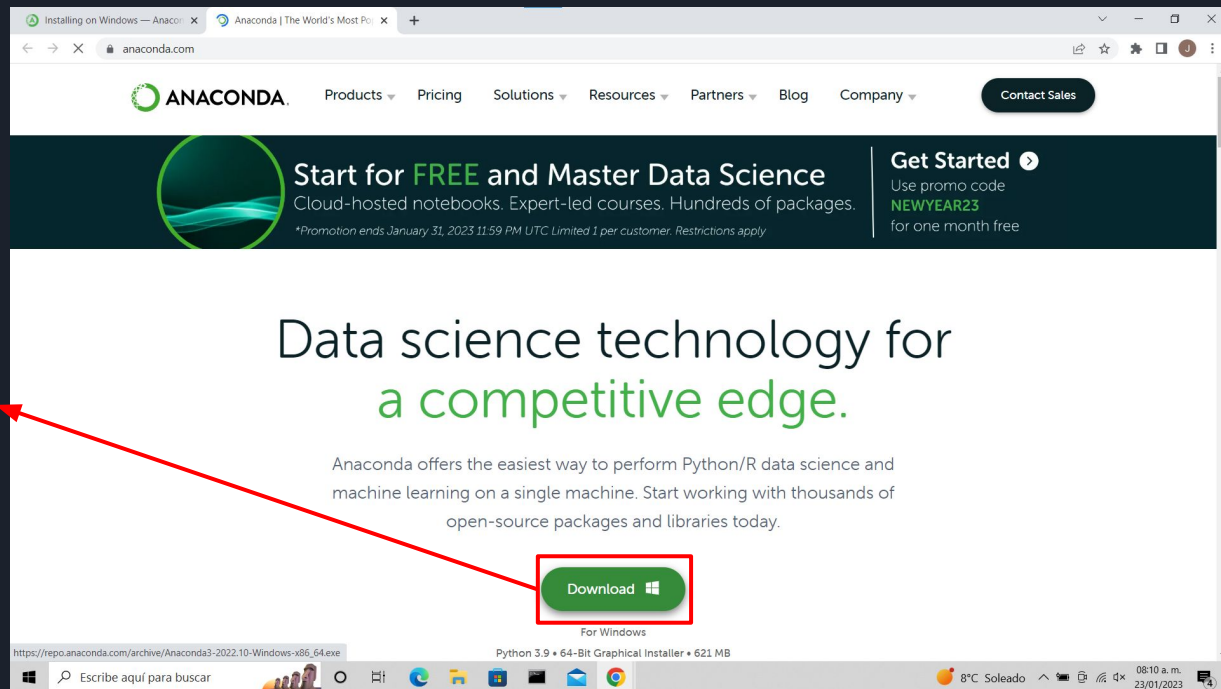
QCL Graduate Fellow

# Installing Anaconda



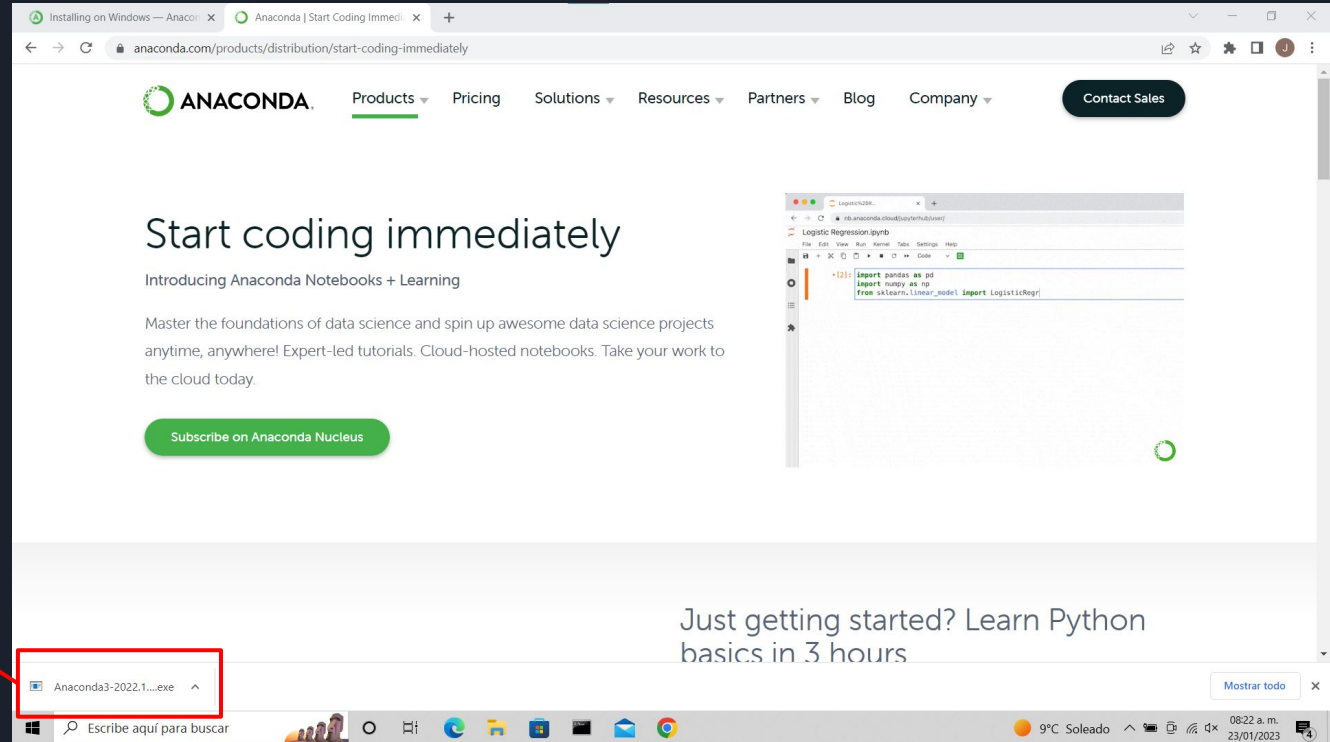
# Install Anaconda

Anaconda is an open-source platform, built for data science, that comes with a package and environment manager for Python and R. To install it, go to <https://www.anaconda.com/> and click on download.



# Install Anaconda

Wait for the installer to download and open it



The screenshot shows a web browser window displaying the Anaconda website. The URL is [anaconda.com/products/distribution/start-coding-immediately](https://anaconda.com/products/distribution/start-coding-immediately). The page features the Anaconda logo, navigation links (Products, Pricing, Solutions, Resources, Partners, Blog, Company), and a 'Contact Sales' button. The main heading is 'Start coding immediately', followed by the subheading 'Introducing Anaconda Notebooks + Learning'. The text describes the benefits of Anaconda, such as mastering data science foundations and spinning up projects anytime, anywhere. A green button labeled 'Subscribe on Anaconda Nucleus' is visible. On the right, there is a preview of the Anaconda Notebook interface showing a Python script for Logistic Regression. At the bottom of the page, there is a section titled 'Just getting started? Learn Python basics in 3 hours'. In the Windows taskbar at the bottom, a file named 'Anaconda3-2022.1...exe' is highlighted with a red box, and a red arrow points from the text 'Wait for the installer to download and open it' to this box. The taskbar also shows the search bar, task view button, and several application icons. The system tray at the bottom right displays the temperature (9°C), weather (Soleado), and the date and time (08:22 a.m., 23/01/2023).

Installing on Windows — Anaco x Anaconda | Start Coding Immedi x +

anaconda.com/products/distribution/start-coding-immediately

ANACONDA. Products Pricing Solutions Resources Partners Blog Company Contact Sales

## Start coding immediately

Introducing Anaconda Notebooks + Learning

Master the foundations of data science and spin up awesome data science projects anytime, anywhere! Expert-led tutorials. Cloud-hosted notebooks. Take your work to the cloud today.

Subscribe on Anaconda Nucleus

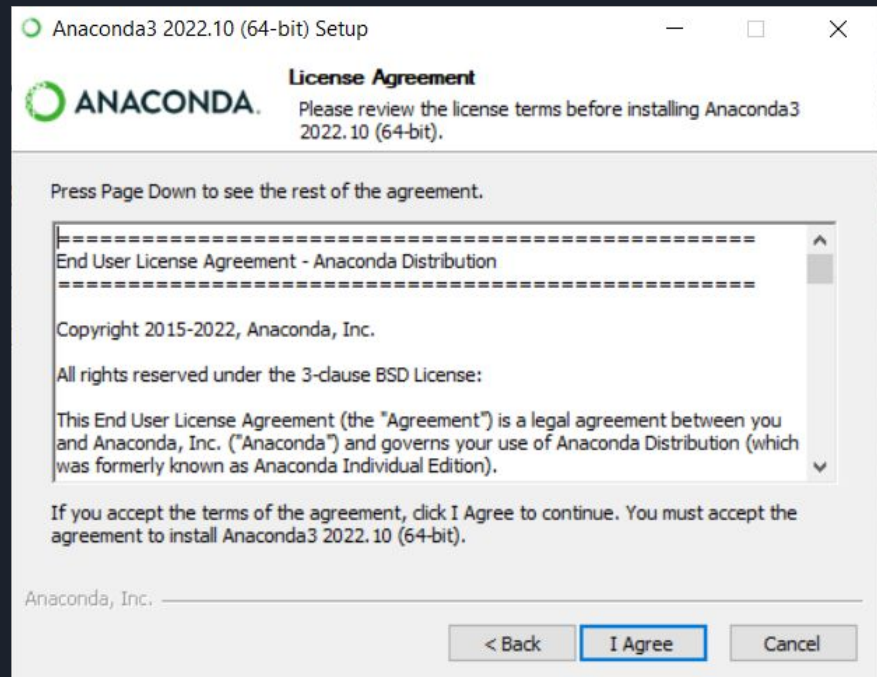
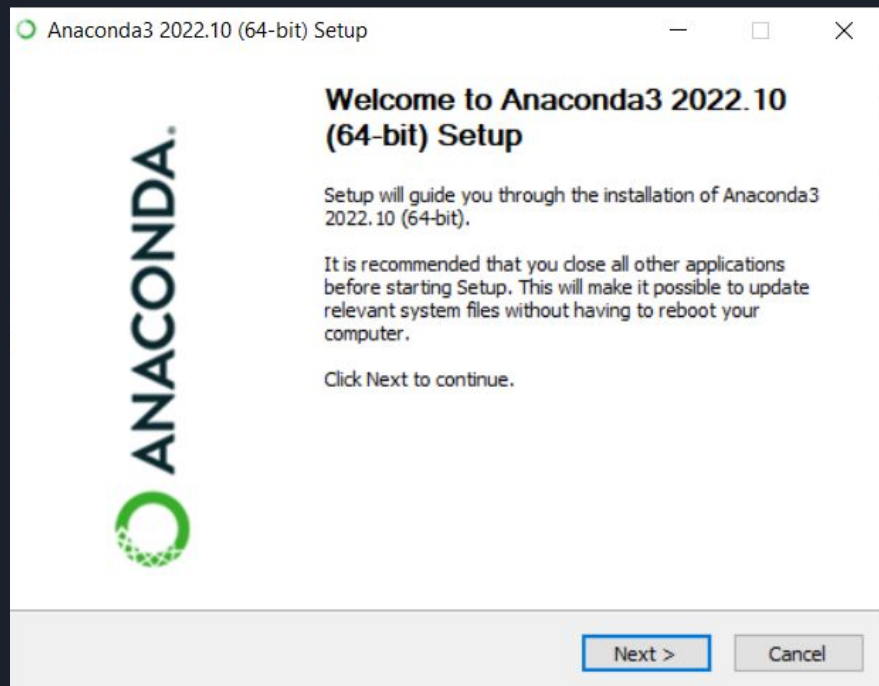
Just getting started? Learn Python basics in 3 hours

Anaconda3-2022.1...exe

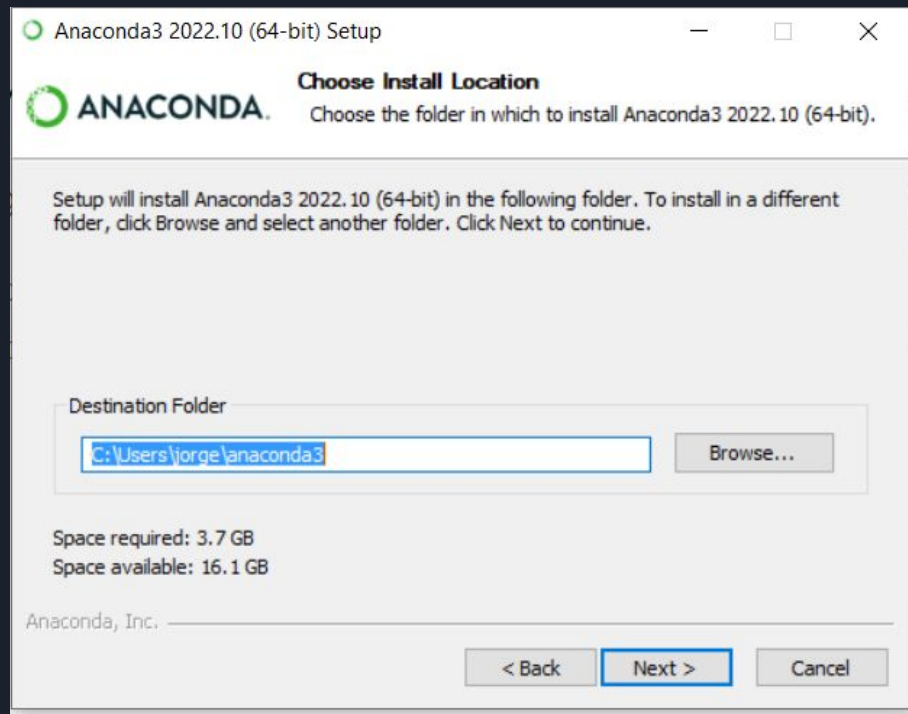
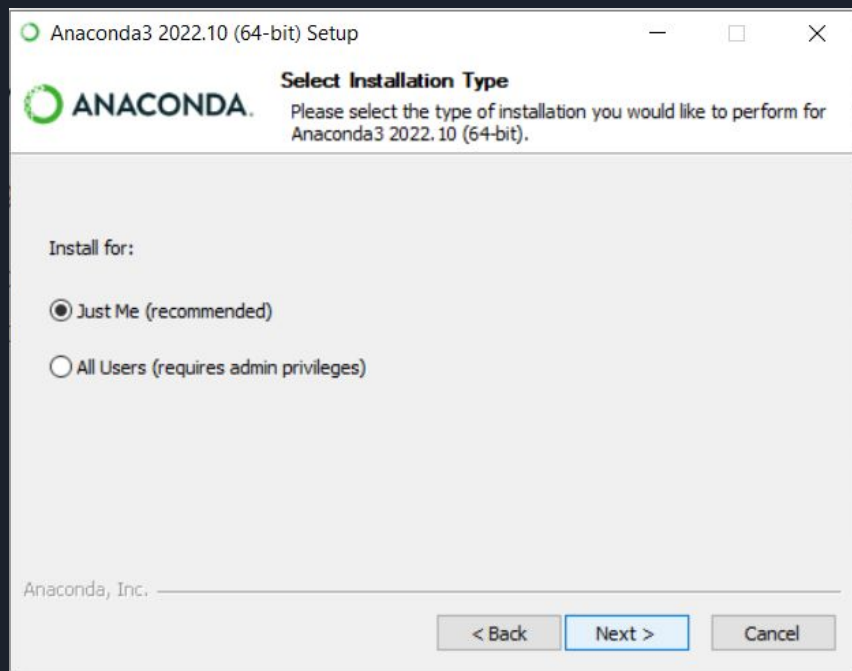
Escribe aquí para buscar

9°C Soleado 08:22 a.m. 23/01/2023

# Install Anaconda



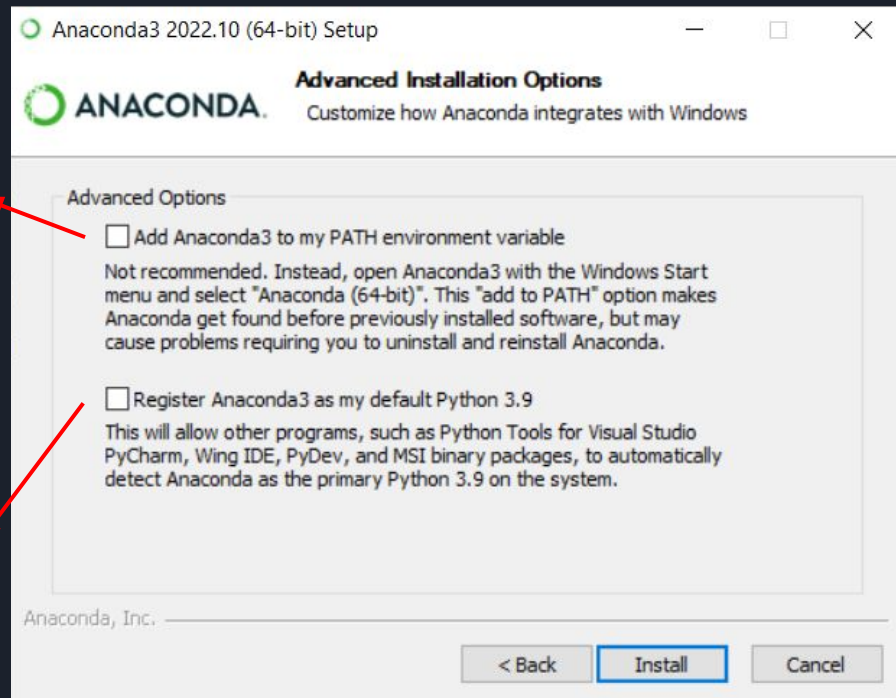
# Install Anaconda



Default options work fine for these steps.

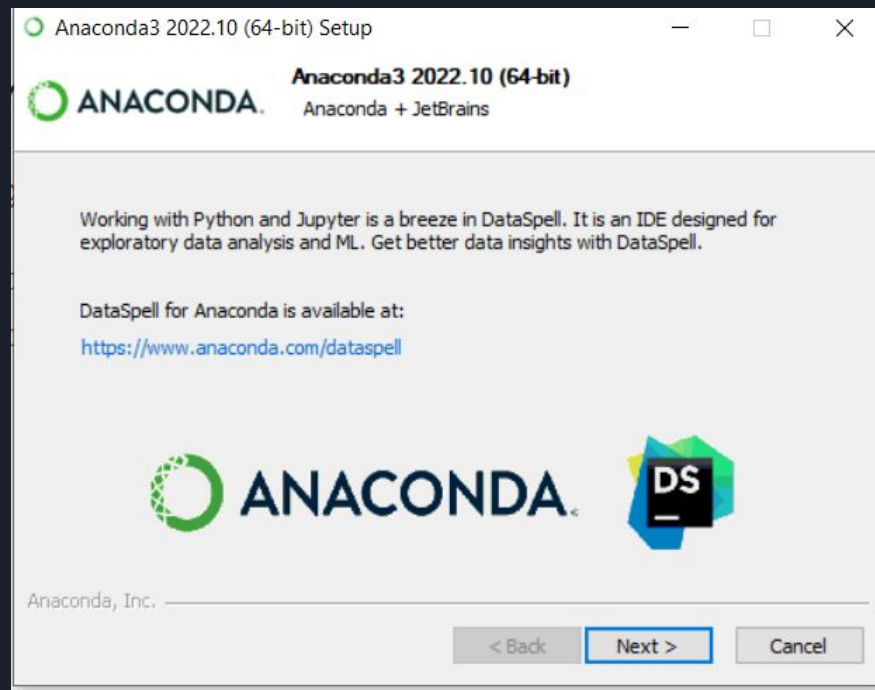
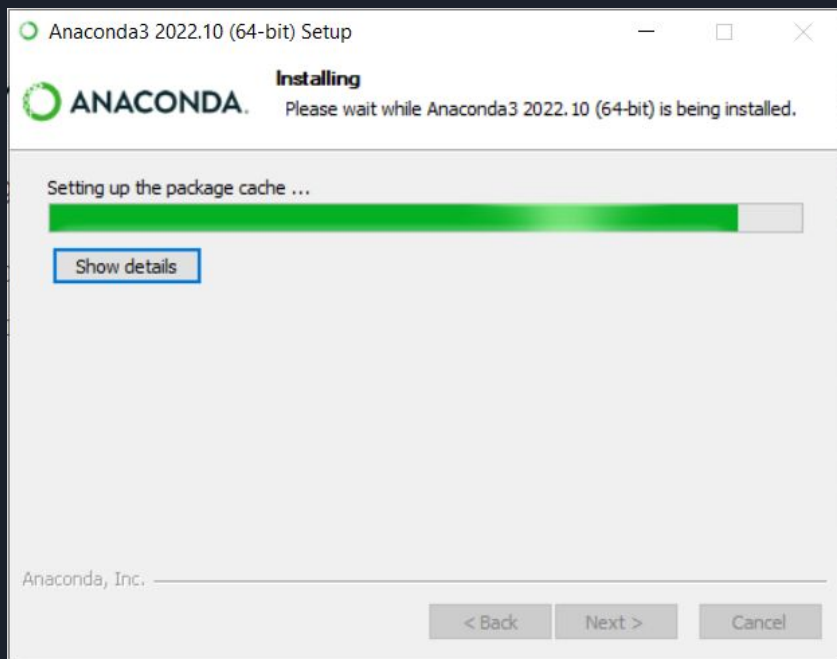
# Install Anaconda

- Make sure the “Add Anaconda3 to my PATH environment variable” is unchecked
- (Optional) Check the “Register Anaconda3 as my default Python 3.9”. Leaving it unchecked will still work fine



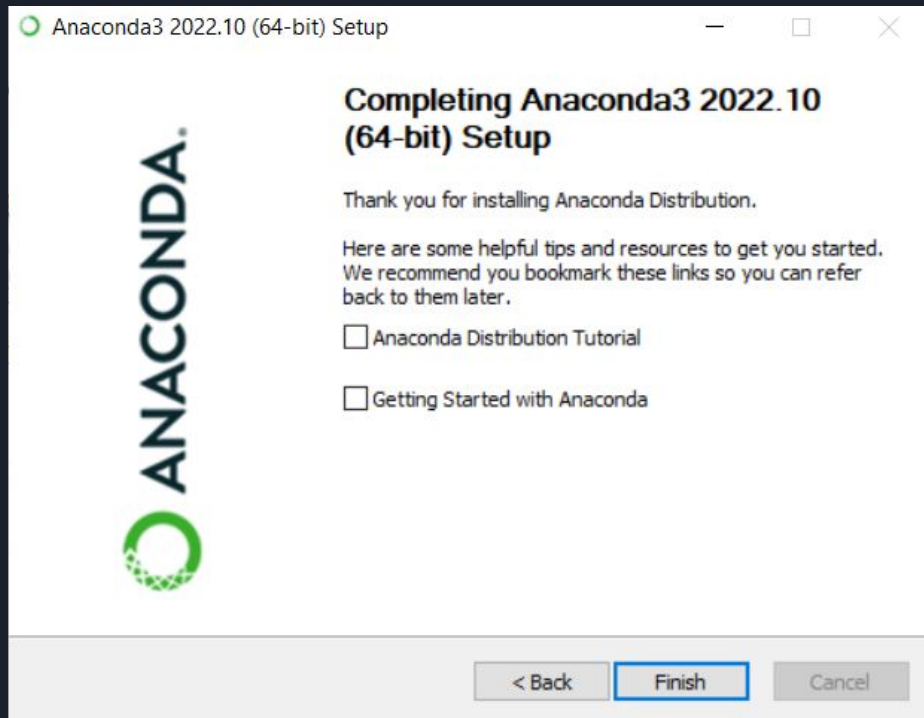
# Install Anaconda

Wait for the installation to finish.





# Install Anaconda



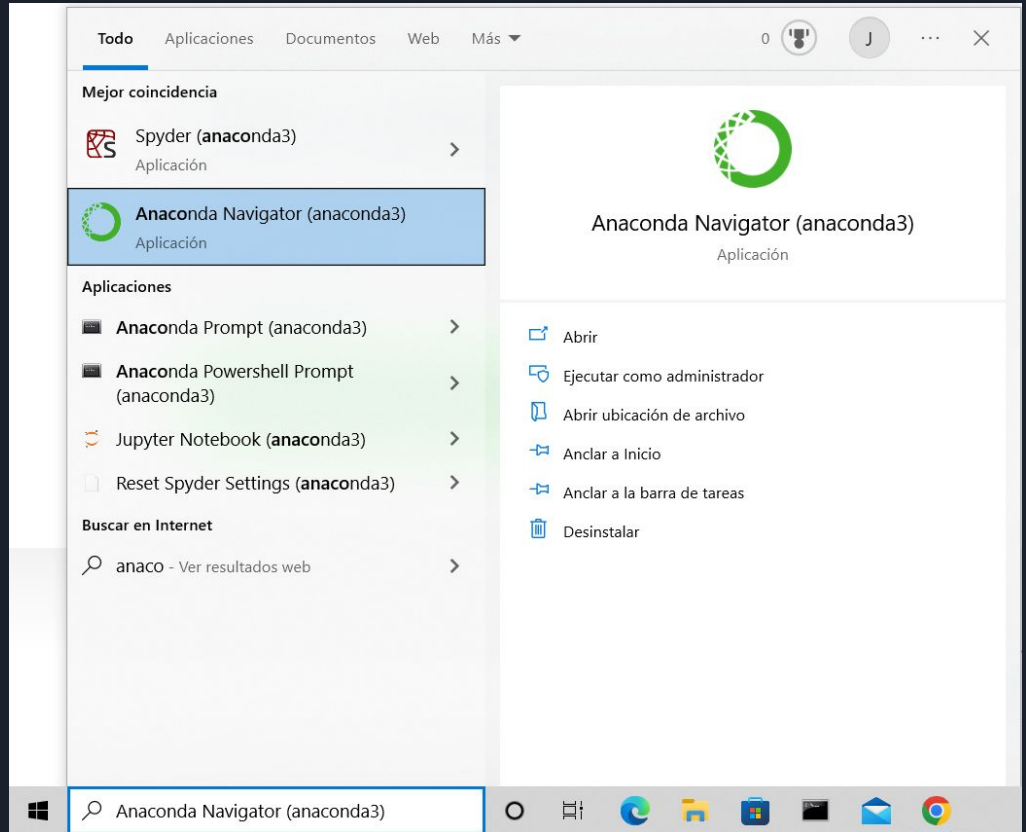
You can leave both options unchecked since all documentation is also available from Anaconda itself.

# Anaconda Navigator

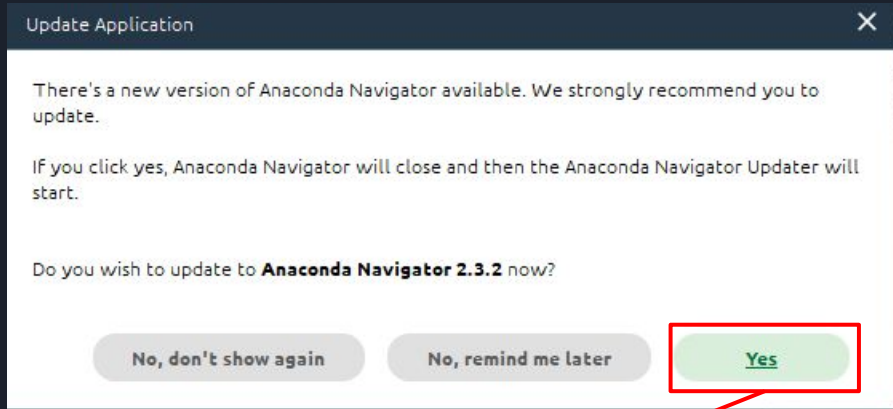


# Anaconda Navigator

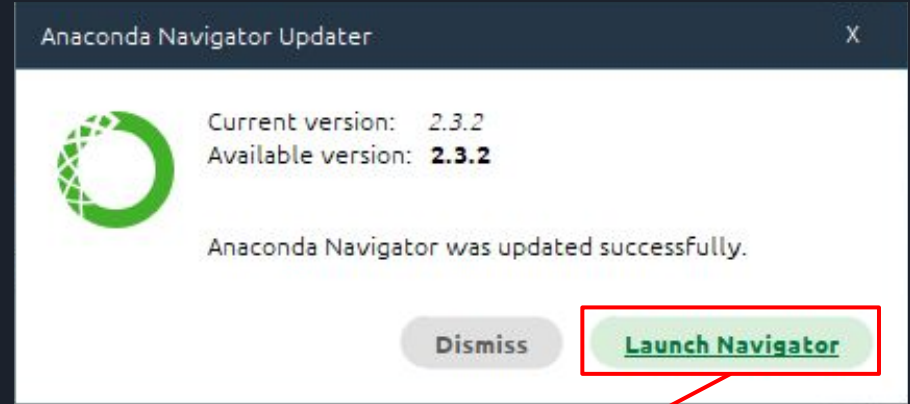
Once it is installed, look for the Anaconda Navigator and open it.



# Anaconda Navigator



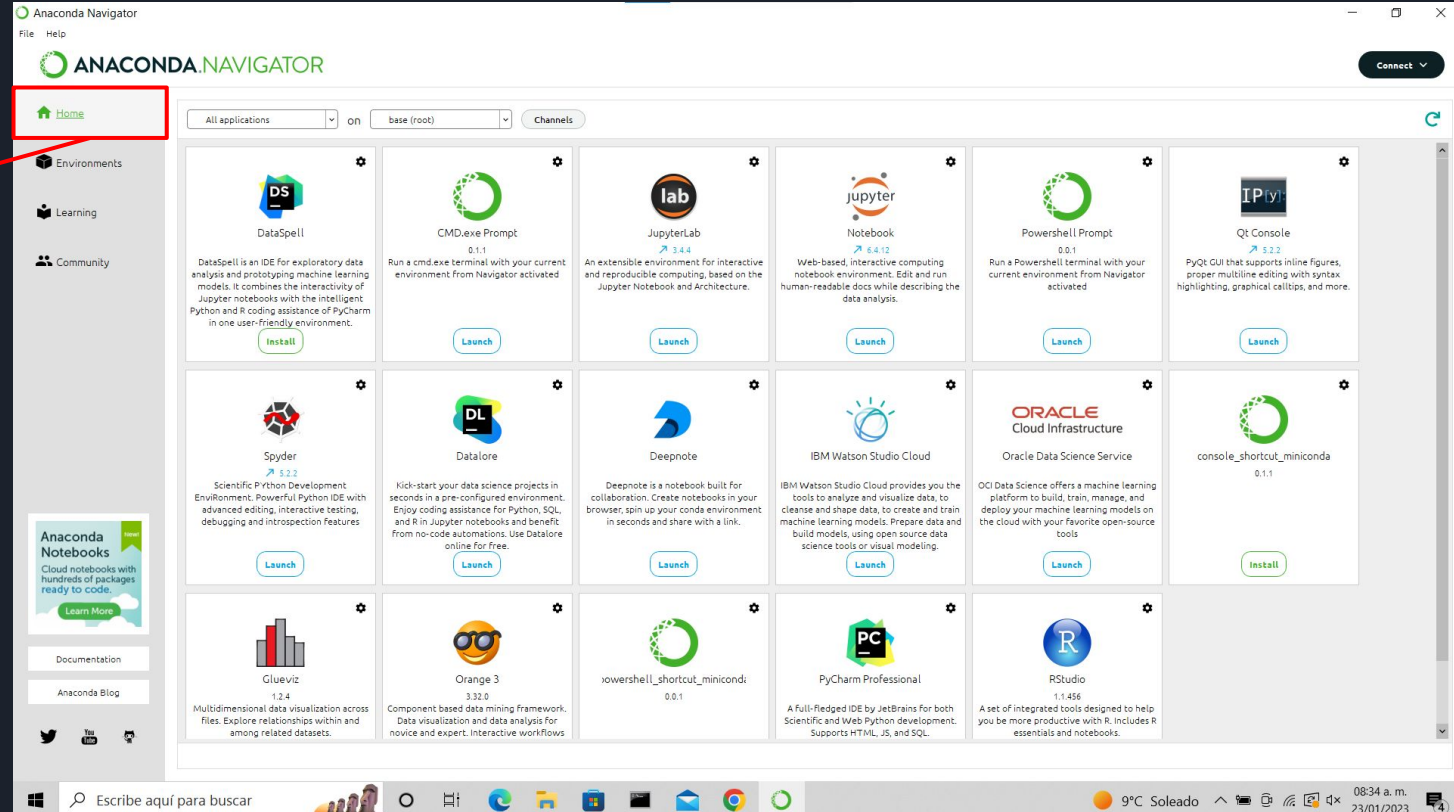
It may ask you to update the navigator.



After updating launch the navigator.

# Anaconda Navigator (Home)

After updating it, launch the Navigator. The "Home" tab (to the left) shows all available applications.



# Anaconda Environments



# Create a new environment

Go to the  
environment tab

Create a new  
environment

The screenshot shows the Anaconda Navigator application window. The left sidebar contains a navigation menu with 'Home', 'Environments', 'Learning', and 'Community'. The 'Environments' tab is selected and highlighted with a red box. Below the sidebar, there is a section for 'Anaconda Notebooks' and links to 'Documentation' and 'Anaconda Blog'. At the bottom of the sidebar, there is a row of icons including a 'Create' button, which is also highlighted with a red box. The main panel displays a list of installed environments and a table of available packages. The table has columns for 'Name', 'Description', and 'Version'. The 'base (root)' environment is currently selected.

Name	Description	Version
✓ _ipyw_lab_nb_ex...	A configuration metapackage for enabling anaconda-bundled jupyter extensions	0.1.0
✓ alabaster	Configurable, python 2+3 compatible sphinx theme.	0.7.12
✓ anaconda	Simplifies package management and deployment of anaconda	2022.10
✓ anaconda-client	Anaconda.org command line client library	1.11.0
✓ anaconda-project	Tool for encapsulating, running, and reproducing data science projects	0.11.1
✓ anyio	High level compatibility layer for multiple asynchronous event loop implementations on python	3.5.0
✓ appdirs	A small python module for determining appropriate platform-specific dirs.	1.4.4
✓ argon2-cffi	The secure argon2 password hashing algorithm.	21.3.0
✓ argon2-cffi-bindings	Low-level python cffi bindings for argon2	21.2.0
✓ arrow	Better dates & times for python	1.2.2
✓ astroid	A abstract syntax tree for python with inference support.	2.11.7
✓ astropy	Community-developed python library for astronomy	5.1
✓ atomicwrites	Atomic file writes	1.4.0
✓ attrs	Attrs is the python package that will bring back the joy of writing classes by relieving you from the drudgery of implementing object protocols (aka dunder methods).	21.4.0
✓ automat	Self-service finite-state machines for the programmer on the go	20.2.0
✓ autopep8	A tool that automatically formats python code to conform to the pep 8 style guide	1.6.0
✓ babel	Utilities to internationalize and localize python applications	2.9.1
✓ backcall	Specifications for callback functions passed in to an api	0.2.0
✓ backports	Namespaces for backported python features.	1.1

# Create a new environment

Make sure only Python is selected and give a name for your environment, preferably without spaces in it.

The screenshot displays the Anaconda Navigator application window. On the left, a sidebar contains navigation links for Home, Environments, Learning, and Community. The main area is divided into a search bar, a list of environments (currently showing 'base (root)'), and a table of installed packages. A 'Create new environment' dialog box is open in the center, allowing the user to specify a name, location, and select between Python (3.9.16) and R (3.6.1) packages. The bottom of the window shows a Windows taskbar with various system icons and the date/time (08:37 a.m., 23/01/2023).

Name	Description	Version
✓ _ipyw_jlab_nb_ex...	A configuration metapackage for enabling anaconda-bundled jupyter extensions	0.1.0
✓ alabaster	Configurable, python 2+3 compatible sphinx theme.	0.7.12
✓ anaconda	Simplifies package management and deployment of anaconda	2022.10
✓ anaconda-client	Anaconda.org command line client library	1.11.0
✓ anaconda-project	To	0.11.1
✓ anyio	High	3.5.0
✓ appdirs	A s	1.4.4
✓ argon2-cffi	Th	21.3.0
✓ argon2-cffi-bindings	Lo	21.2.0
✓ arrow	Be	1.2.2
✓ astroid	A abstract syntax tree for python with inference support.	2.11.7
✓ astropy	Community-developed python library for astronomy	5.1
✓ atomicwrites	Atomic file writes	1.4.0
✓ attrs	Attrs is the python package that will bring back the joy of writing classes by relieving you from the drudgery of implementing object protocols (aka dunder methods).	21.4.0
✓ automat	Self-service finite-state machines for the programmer on the go	20.2.0
✓ autopep8	A tool that automatically formats python code to conform to the pep 8 style guide	1.6.0
✓ babel	Utilities to internationalize and localize python applications	2.9.1
✓ backcall	Specifications for callback functions passed in to an api	0.2.0
✓ backports	Namespace for backported python features	1.1



Install packages



2) Select "All" from the dropdown menu

3) Search for name of the package (e.g. "numpy")

1) Make sure the environment is selected

4) Check the desired packages

The screenshot shows the QCL-Workshop interface. On the left, a sidebar lists environments, with 'base (root)' and 'QCL-Workshop' visible. The main area displays a list of packages. A dropdown menu is open, showing options: 'All', 'Installed', 'Not installed', 'Updatable', 'Selected', and 'All' (checked). The search bar at the top right contains the text 'numpy'. The package list shows 'numpy' with a green checkmark icon. At the bottom right, there is an 'Apply' button and a 'Clear' button. The status bar at the bottom indicates '17 packages available matching "numpy" 1 package selected'.

Package	Description	Version
numpy	NumPy array functions specialized for use in orange	0.7.1
numpy-base	Array processing for numbers, strings, records, and objects.	1.9.3
numpy-dev	Array processing for numbers, strings, records, and objects.	1.9.3
numpydoc	Sphinx extension to support docstrings in numpy format	1.5.0
opt_einsum	Optimizing einsum functions in numpy, tensorflow, dask, and more with contraction order optimization.	3.3.0
pytables	Brings together python, hdf5 and numpy to easily handle large amounts of data.	3.7.0
snuggs	Snuggs are s-expressions for numpy	1.4.7

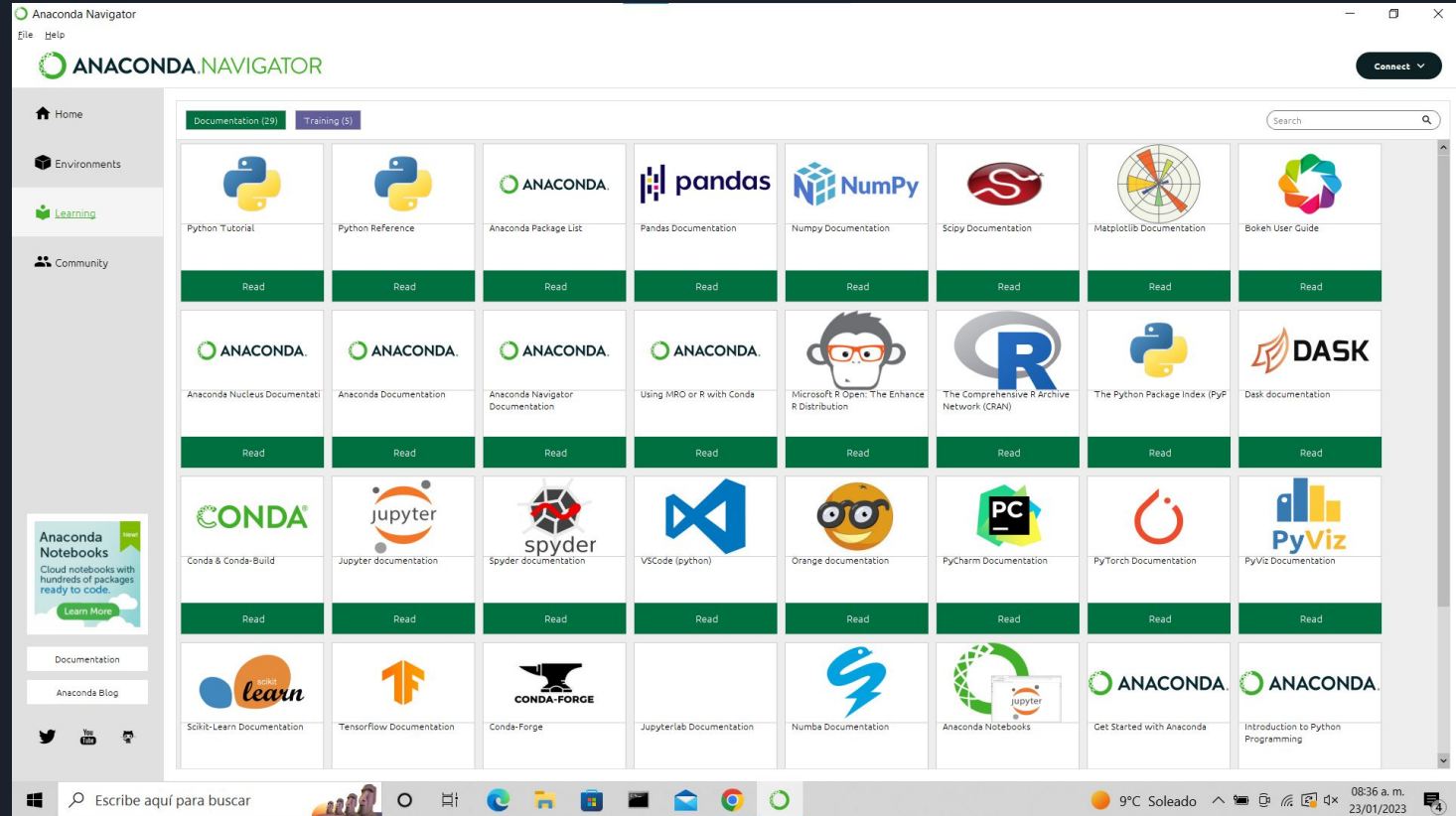
5) Click on "Apply"

Community &  
Documentation  
(Optional)



# Anaconda Documentation

Here, you'll be able to read on any necessary documentation whenever you have a question.



# Anaconda Community

In particular, Stack Overflow is great to solve any issue you might encounter.

