INSTALLING ANACONDA AND RUNNING PYTHON ON A PERSONAL COMPUTER

Why Anaconda?

Anaconda has several programming packages and languages that are used in data science, machine learning, and deep learning. It is an open-source distribution software that makes it easier to install, run, and update packages and its dependencies.

Google colab is different from anaconda because you can write and execute Python code without installation.

Installing Anaconda on Windows

These instructions are used to install Anaconda distribution of Python on Windows 10/11.

1. Go to https://www.anaconda.com/download/
2. Choose Windows
3. Download the Python 3.x version (64-/32-Bit Graphical Installer)
    a. Open the installer and click on Next
    b. Read the license agreement and click on I Agree
    c. Select Just Me (recommended) and click Next
    d. At the Advanced Installation Options screen, check Register Anaconda as my default python 3.x and click on Install
4. Go to the Windows start menu and select the Anaconda Prompt (command line shell
    a. You can type in commands in here
    b. type in conda --version and python --version to see the version of what is installed

Executing codes

You execute codes either jupyter notebook or python interactive mode

Using Python

You can type codes from Python interactive mode.

1. In the Anaconda Prompt, type python
2. At the >>> type print ("Hello World") and Enter
3. To exit out of the interactive mode, type exit()

Using Jupyter notebook- used in typing and editing Python scripts.

You can either open Jupyter Notebook with Anaconda Prompt or Anaconda Navigator

Opening Jupyter Notebook with Anaconda Prompt

1. In the Anaconda Prompt >>> type jupyter notebook
2. Notebook opens in a browser

3. Or you can copy the link and paste on a browser
4. You can create a new notebook by clicking on New then Python 3 located at the top right
5. You can start typing in commands

Opening Jupyter Notebook with Anaconda Navigator

1. Click on Anaconda Navigator on Window start menu
2. On Jupyter Notebook click on Install
3. Eventually click on Launch
4. A jupyter File browser will open in a web browser
5. You can create a new notebook by clicking on New then Python 3 located at the top right
6. You can start typing in commands

CREATING AN ENVIRONMENT

Creating and Setting Up environment

Replace 'env_name' which any name of your choice

1. In your anaconda prompt, type conda create --name env_name

Creating environment with a specific python version

1. Type conda create --name env_name python=version_number
    a. version_number can 3, 3.9 or any desired version

Creating an environment from an existing environment file

1. Type conda env create -f environment.yml
    a. In your case, you won't have an existing environment.yml file. So you do not have to do this step.

Activate the new environment

1. To activate the environment that was created, type conda activate enn_name

To see all environments created

1. Type either conda env list or conda info --envs to see all environments.* means that you are currently using that environment