0_anacondaJupyter

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1 Anaconda & Environments & Jupyter Notebook

1. A 64-bit Anaconda version can be downloaded from: Anaconda
   - Anaconda is a package manager tool. Downloaded libraries and packages are confined to environments, and Anaconda prevents conflicts between packages of different projects
   - Anaconda needs to be the default python tool in the installation prompt
   - **Anaconda should be added to PATH**
2. Once the download is complete:
   - For Linux and Mac users, open the standard terminal integrated in your system
   - For Windows users, use the Anaconda Prompt Terminal
3. Create a new environment using:
   - conda create –name ENVNAME python=PythonVersion. Example: conda create –name firstProject python=3.9
4. Environment activation/deactivation using:
   - Activation: conda activate ENVNAME. Example: conda activate firstProject
   - Deactivation: conda deactivate
   - For more information about environments: Managing Enviroments
5. Jupyter notebook Installation using:
   - conda install jupyter
6. Common useful packages relevant to Machine Learning:
   - Python Data Analysis Library: conda install pandas
   - Visualization with Python: conda install matplotlib
   - Machine Learning in Python: conda install scikit-learn. Note that numpy & scipy, useful linear algebra and statistics tools, are installed with scikit-learn.
7. Open Jupyter notebook:
   - Navigate in the terminal to your desired working directory
   - In the console, enter: jupyter notebook
   - For more information about Jupyter Notebook: Jupyter Notebook Guide

2 Importing Libraries

Libraries are publicly available repositories of code. You will need to import them into your projects using the import keyword. Libraries can also be given an aliad using the as keyword.

[2]:
```
import numpy as np
import pandas as pd
import seaborn as sns
import matplotlib.pyplot as plt
from sklearn.linear_model import LinearRegression as LinReg
```