# Anaconda Software

# What is Anaconda?

- Anaconda is a free and open-source distribution of the different programming languages like Python and R

- The idea behind Anaconda has been to make it easy for people interested in the fields of machine learning and data science to install all (or most) of the packages needed with a single installation

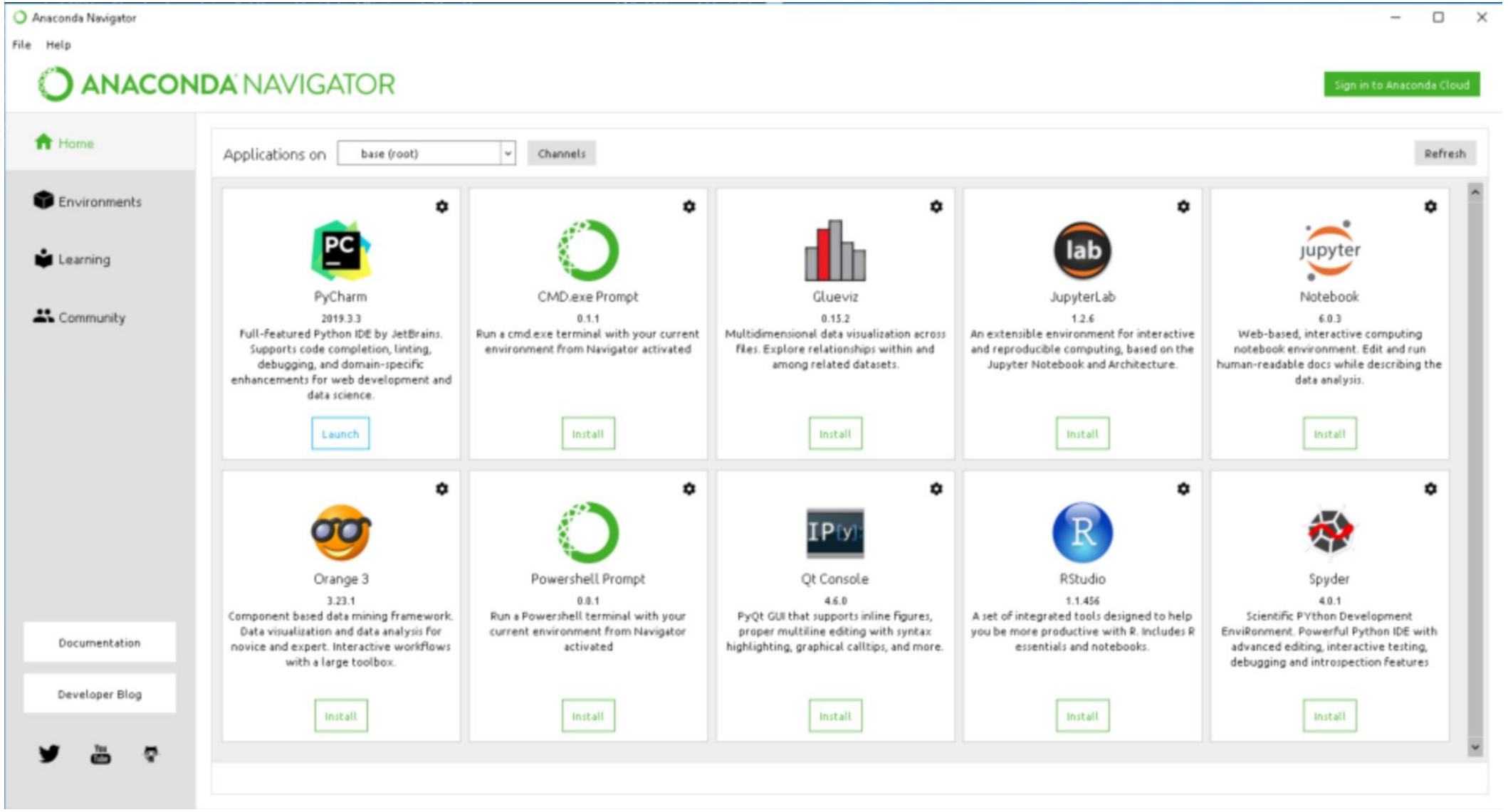
# What is included with Anaconda

- It includes an open-source package and environment management system called Conda, which makes it easy to install/update packages and create/load environments
- Machine learning libraries like scikit-learn and Theano
- Data science libraries like pandas, NumPy
- Jupyter Notebook, a shareable notebook that combines live code, visualizations and text.

# Anaconda Navigator

- Anaconda Navigator is a desktop graphical user interface (GUI) included in Anaconda® distribution that allows us to launch applications and easily manage packages, environments, and channels without using command-line commands.

- Navigator is an easy, point-and-click way to work with packages and environments without needing to type commands in a terminal window. You can use it to find the packages you want, install them in an environment, run the packages, and update them – all inside Navigator.



# How does Anaconda relate to Python

- In layman's language Anaconda is an easy way to install a Python interpreter + various data science packages

- Imagine a scenario where you try to run the code in different systems with only python installed, but get the following error:

```
Traceback (most recent call last):
File "analyze_data.py", line 5, in <module>
 import pandas as pd
ImportError: No module named pandas
```

- The error tells that one of your system does not have all the required packages installed to run your program.

- However, if both of your systems have Anaconda installed you wouldn't run into this kind of issue

- The distribution ensures that both of you have the same packages and dependencies installed, even if one of you is running windows and the other macOS

# Python Interpreter

- Python is an interpreter language. It executes the code line by line.
- Python provides a Python Shell, which is used to execute a single Python command and display the result.
- The Python interpreter takes the code that you write and converts it into the language that the computer's hardware understands, basically converts high level language to low level language

# REFERENCES


1. https://www.anaconda.com/
2. https://en.wikipedia.org/wiki/Anaconda_(Python_distribution)

Microsoft SAP edunet foundation

# THANK YOU