Objective of the class

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Installing Anaconda

- What is Anaconda Distribution?
- How it is different from Python Distribution?
- How to install Anaconda?
- conda repository
- Anaconda Navigator
- pip and conda to get new package
- pip and conda commands
- set Virtual
- Integrating Anaconda with Pycharm

What is Anaconda Distribution

- Anaconda is a freemium open source distribution of the Python and R programming languages for large-scale data processing, predictive analytics, and scientific computing, that aims to simplify package management and deployment.Package versions are managed by the package management system conda.

- With over 4.5 million users, the open source Anaconda Distribution is the easiest way to do Python data science and machine learning. It includes hundreds of popular data science packages and the conda package and virtual environment manager for Windows, Linux, and MacOS. Conda makes it quick and easy to install, run, and upgrade complex data science and machine learning environments like scikit-learn, TensorFlow, and SciPy.

How it is different from Python Distribution?

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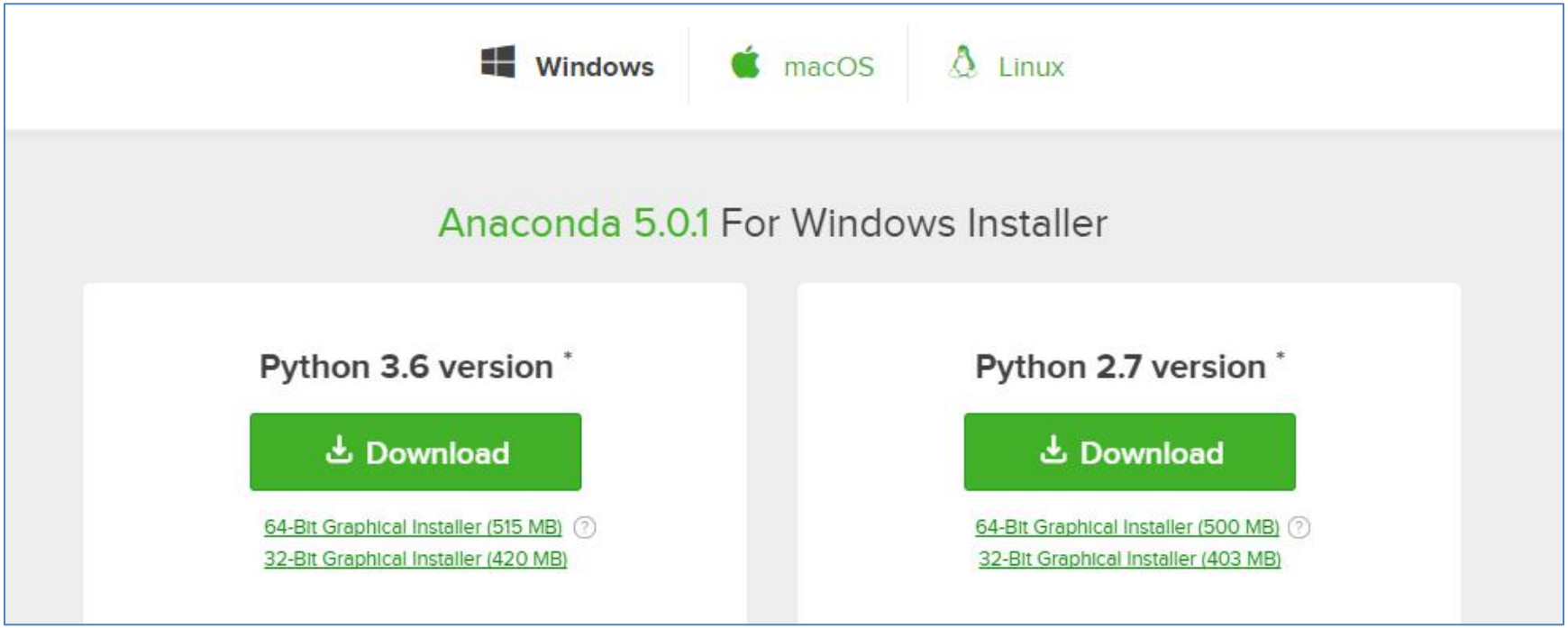
- Anaconda Data Science Libraries
- Over 1,000 Anaconda-curated and community data science packages
- Develop data science projects using your favorite IDEs, including Jupyter, JupyterLab, Spyder and RStudio
- Analyze data with scalability and performance with Dask, numpy, pandas and Numba
- Visualize your data with Bokeh, Datashader, Holoviews or Matplotlib
- Create machine learning and deep learning models with Scikit-learn, Tensorflow, h20 and theano

Installing Anaconda

Official Website for Installing Anaconda

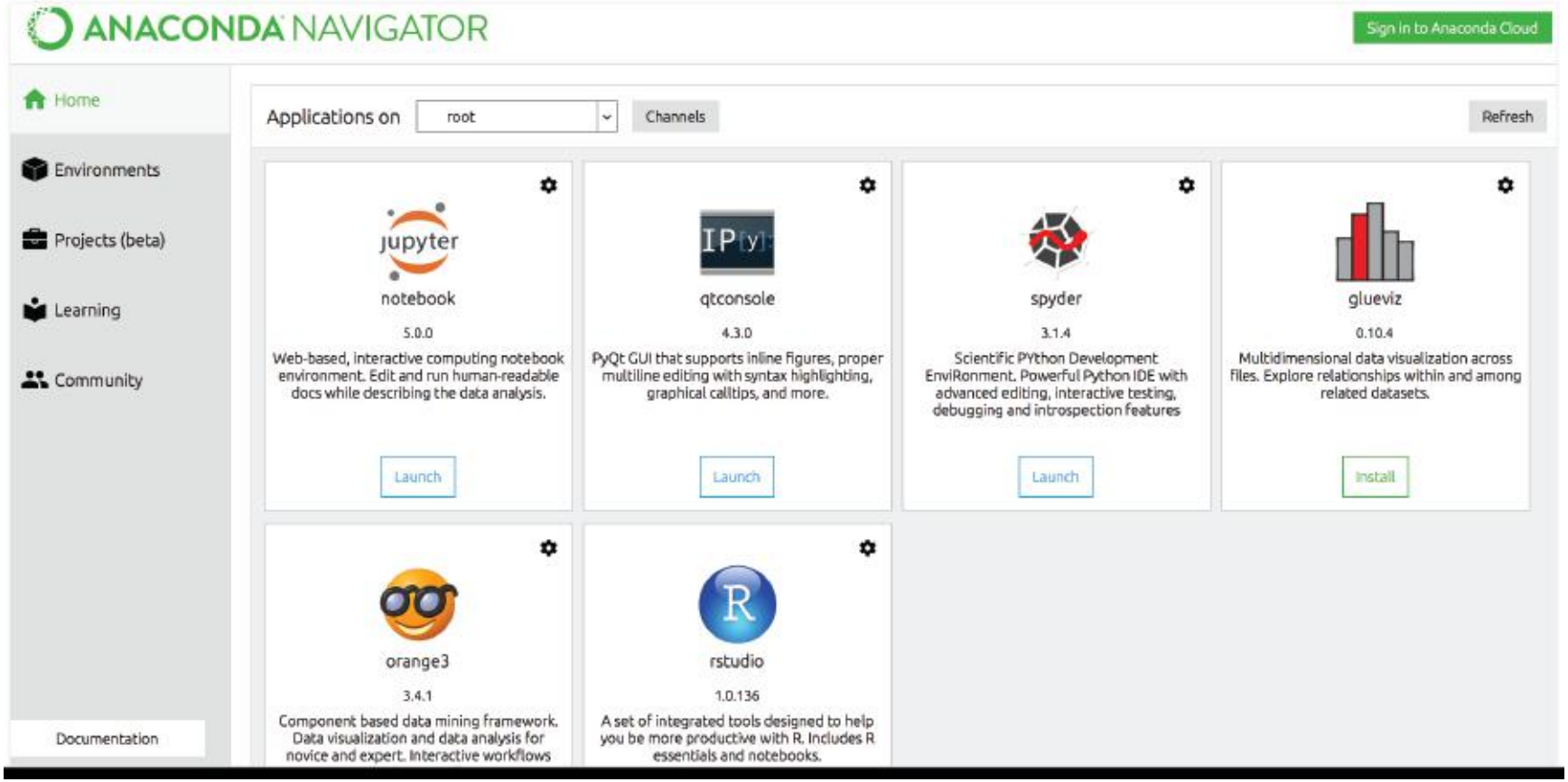
- https://www.anaconda.com/download/



Conda Repository

- Conda, the Data Science Package & Environment Manager
- Can be used with any programming language or even multi-language projects
- Works across all platforms: Linux, macOS, Windows
- Handles environments natively
- Download conda packages from Anaconda, Anaconda Cloud, Anaconda Enterprise or Conda Forge

Anaconda Navigator



Pip and conda Installer

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- pip is a package management system used to install and manage software packages written in Python. Many packages can be found in the Python Package Index (PyPI).
- Python 2.7.9 and later (on the python2 series), and Python 3.4 and later include pip (pip3 for Python 3) by default.
- pip is a recursive acronym that can stand for either "Pip Installs Packages" or "Pip Installs Python".
- pip is quite similar to easy_install. It is a python module that lets you download, build, install, and manage Python packages automatically.
- To install pip, download the get-pip.py file from https://pip.pypa.io/en/latest/installing.html
- To install the package using pip, supply the filename only.

Pip commands

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The most common scenario to install a package using **pip** is:

- pip –h # to display the help page
- pip list # to display the installed packages
- pip list –outdated # to display all outdated package
- pip search xlrd # to search the package in repo
- pip install Package # latest version
- pip install Package==1.0.4 # specific version
- pip install 'Package>=1.0.4' # minimum version requirement
- pip uninstall package # to uninstall the package
- pip install –upgrade # to upgrade the package

Create a virtual Env

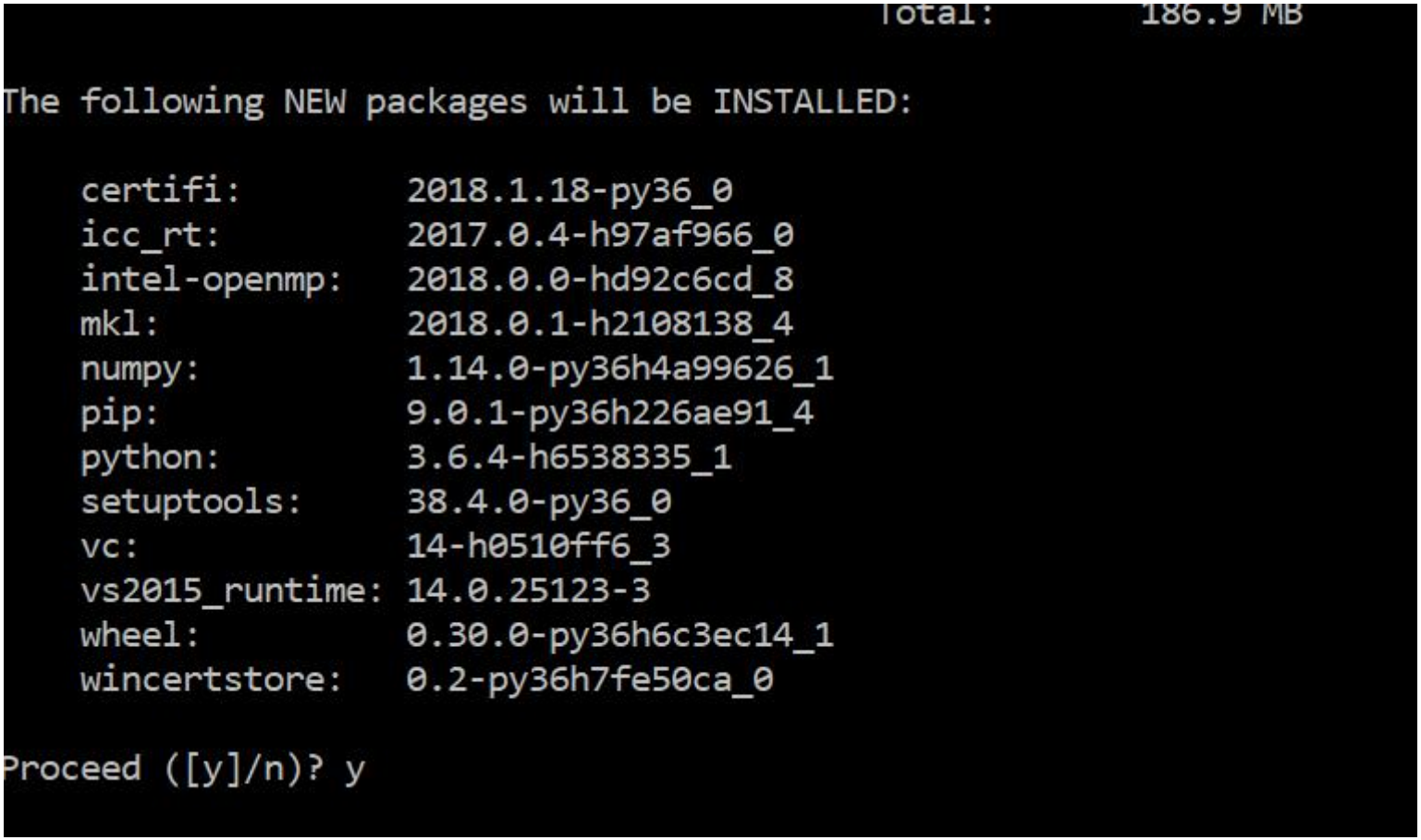
```
C:\Users\Jatin Sir>conda create --name myProject numpy
Solving environment: done

## Package Plan ##

  environment location: C:\Anaconda\envs\myProject

  added / updated specs:
    - numpy
```

Create a virtual Env



Create a virtual Env

```
Executing transaction: done
#
# To activate this environment, use:
# > activate myProject
#
# To deactivate an active environment, use:
# > deactivate
#
# * for power-users using bash, you must source
#
```

Integrating Anaconda with Pycharm