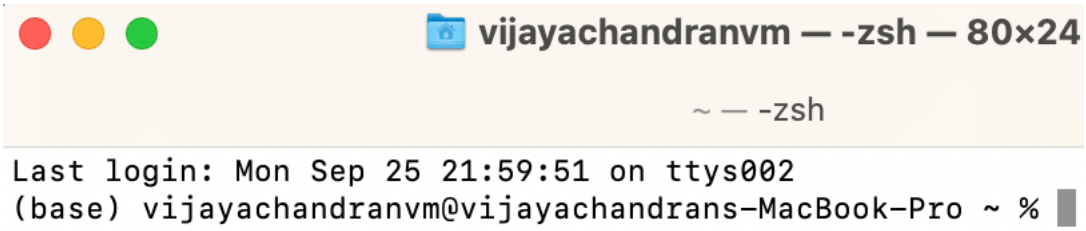
Tuesday, 26 September 2023

Python Environment

STEP 1: Install Miniconda

- Miniconda - Install https://docs.conda.io/projects/miniconda/en/latest/miniconda-install.html
- Once you did the above, you should see the prompt like this on your terminal, with (base).



- for windows, search for anaconda/miniconda prompt

STEP 2: Create a conda virtual environment

#below the environment is created as ai. Type the following on terminal

conda create -n ai python=3.10

#activate ai virtual environment.

```
conda activate ai
```

```
(base) vijayachandranvm@vijayachandrans-MacBook-Pro ~ % conda activate ai
(ai) vijayachandranvm@vijayachandrans-MacBook-Pro ~ %
```

You should see (ai) in your terminal. So you are inside that environment.

#install dependencies using pip.

```
pip install numpy
pip install openai
pip install hugging face
pip install langchain
pip install pandas
pip install jupyter notebook
```

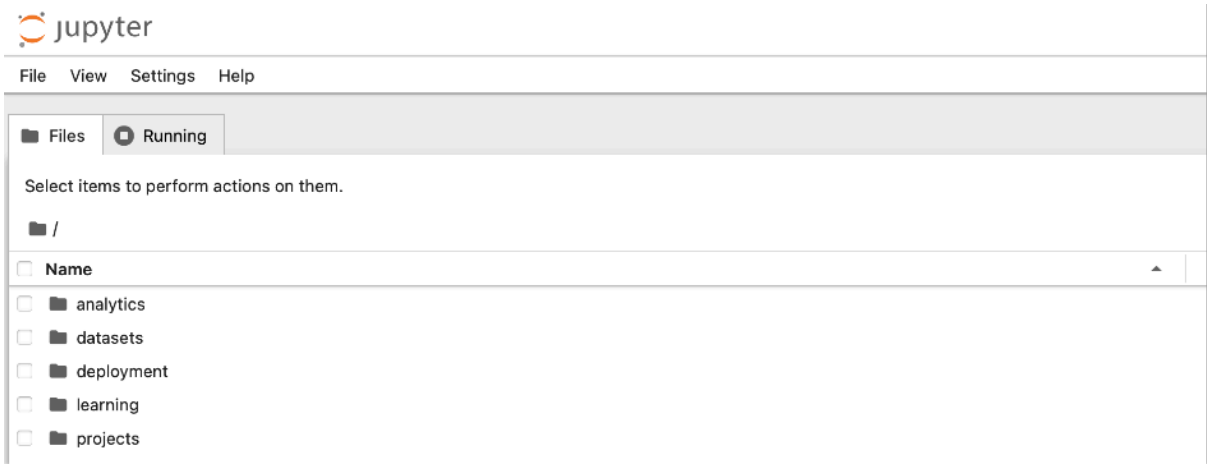
STEP 3: Work using Jupyter notebook

Type Jupyter notebook

```
(ai) vijayachandranvm@vijayachandrans-MacBook-Pro workspace % pwd
/Users/vijayachandranvm/workspace
(ai) vijayachandranvm@vijayachandrans-MacBook-Pro workspace % jupyter notbook
```

Note in the above I called Jupiter notebook from workspace directory. So I can create/access all files and subfolders from that directory only. So type Jupyter notebook where you want to work from.

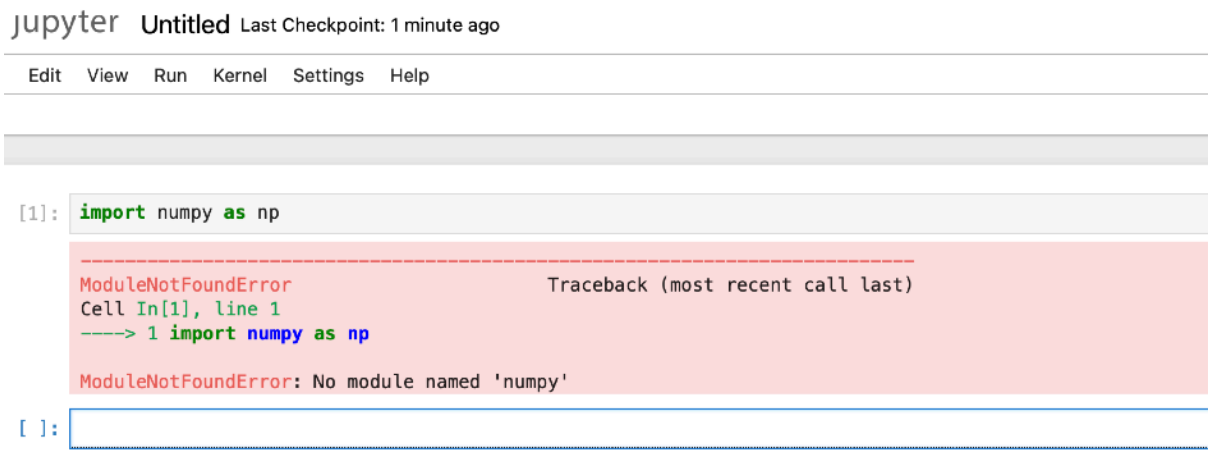
This will open a window in your default browser, like below. Navigate to the folder you want to work on.



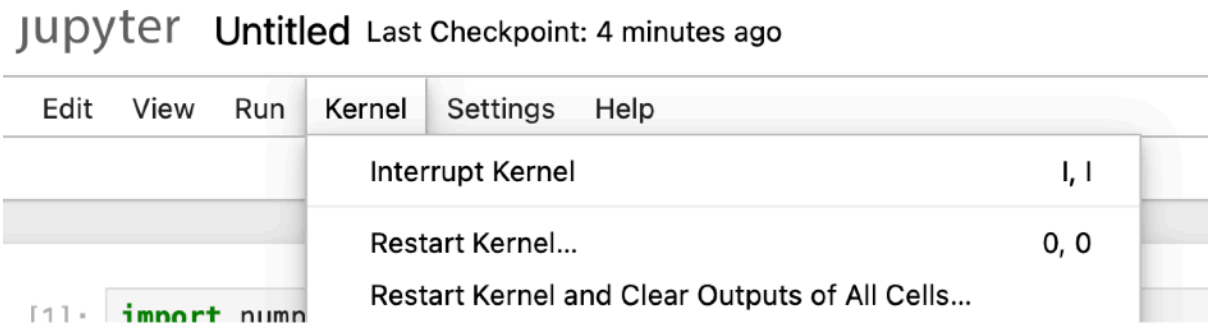
Create a notebook to work from:

Click New->Notebook-> Select Python 3 (ipykernel)

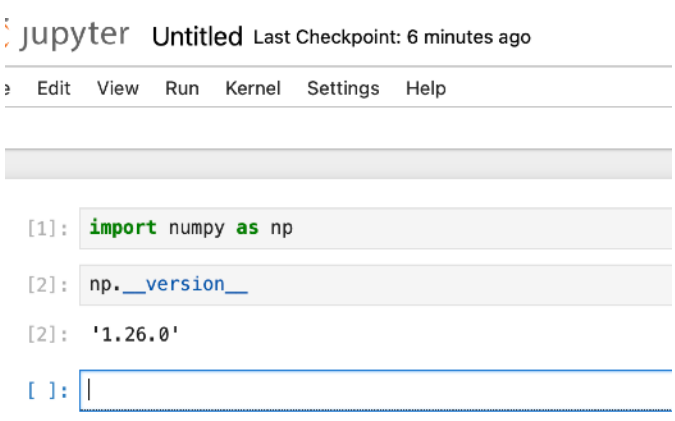
It wil create a untitled notebook. You can rename it by clicking on Untitled. Then you can load python modules. Here when I tried to load numpy, it said Module not found. So you open a new anaconda terminal, activate ‘ai’ environment and the type ‘pip install numpy’



Once you have installed, do Kernel->Restart Kernel and Clear outputs



Checking now:



We will use Jupyter notebook extensively, so get this step done.

New ideas and work involve new modules that need to be load. All you need to do is pip install <module name>

Ex. Install numpy

```
(ai) vijayachandranvm@vijayachandrans-MacBook-Pro ~ % pip install numpy
```