

# Analytics Jumpstart

## Introduction

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**Mahesh Rao, Instructor/Data Scientist at Amira Learning**

**Justin Rothbart, Instructor/Data Analyst at Ingram Content Group**

**Mary van Valkenburg, Instructor/Program Manager at NSS**



- Your name
- The place you call home
- Something people are usually surprised to discover about you



# ***Classroom guidelines***

- Ask lots of questions
- Help each other; learn from each other
- Get comfortable with discomfort. Making mistakes, figuring them out, and then correcting them is part of the learning process
- After working through the assignment, form your own ideas and do your own exploration beyond what has been suggested



# **Class format**

- 1. Concepts/Code Lecture**
- 2. Coding practice**
- 3. Interactive with instruction team and other students!**



# Goals for the class

- **Get hands-on experience of what it might be like to work as a data analyst or data scientist**
- **Get an idea of whether or not this might be a good fit for a career**
- **Learn some tools to help you on personal analysis projects**
- **Make discoveries and have fun**

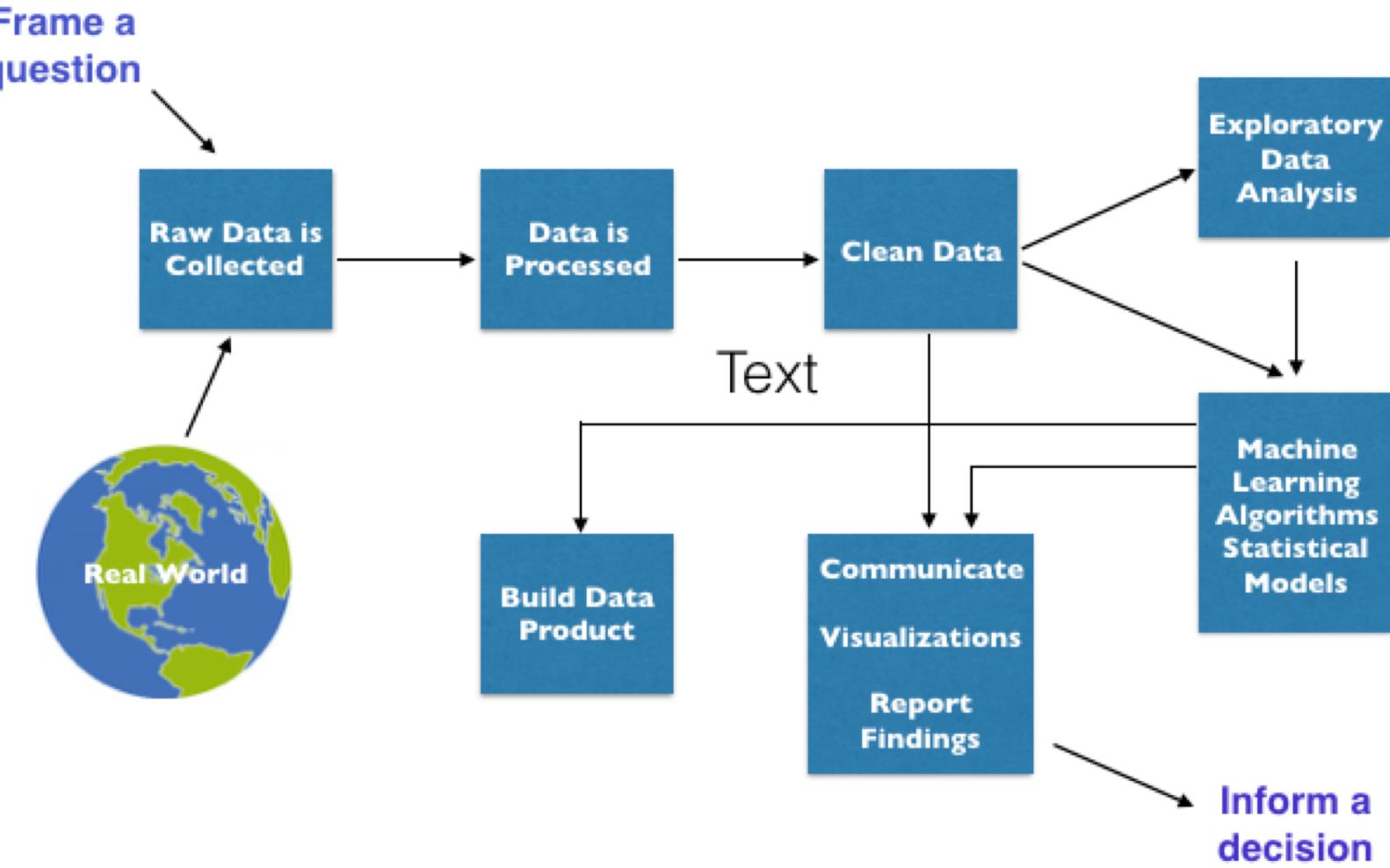


# Goals for today

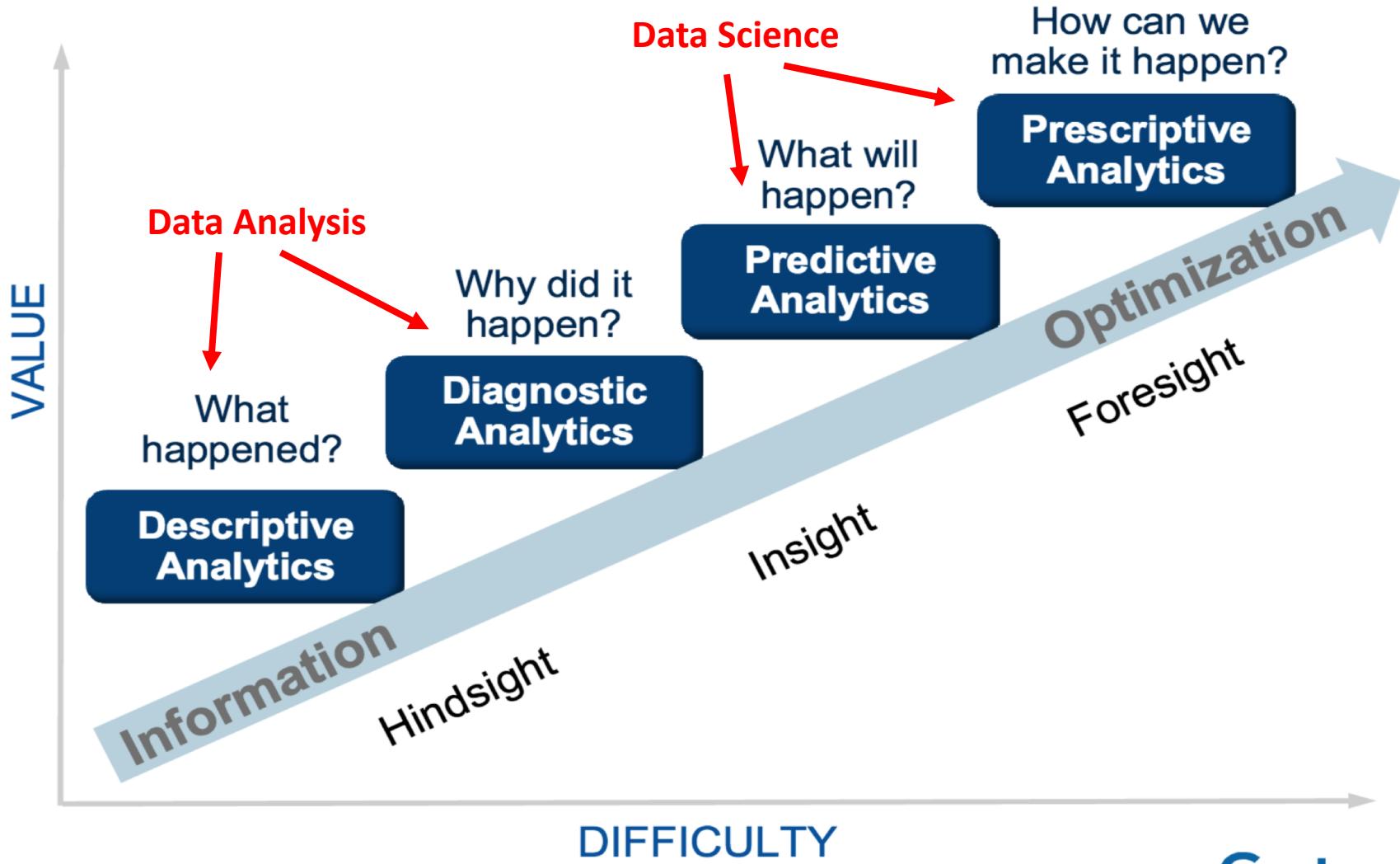
- Define the Data Science Process – *a basic mental model for analysis*
- Define *different types* of analytics and differentiate between Data Analytics and Data Science
- Jupyter Notebook walkthrough/orientation
- Analysis Guide walkthrough
- Get started on the project!



# The Data Science Process



# Gartner Analytic Ascendancy Model



Home

localhost:8888/tree

jupyter

Logout

Files    Running    Clusters    Nbextensions

Select items to perform actions on them.

Upload    New    Refresh

Name ↑    Last Modified ↑

| <input type="checkbox"/> | Applications             | a year ago   |
|--------------------------|--------------------------|--------------|
| <input type="checkbox"/> | Applications (Parallels) | 3 years ago  |
| <input type="checkbox"/> | BayesMadeSimple          | 3 years ago  |
| <input type="checkbox"/> | Coursera                 | a year ago   |
| <input type="checkbox"/> | Creative Cloud Files     | a year ago   |
| <input type="checkbox"/> | DataCamp_course          | 5 days ago   |
| <input type="checkbox"/> | Desktop                  | 4 days ago   |
| <input type="checkbox"/> | Documents                | 4 days ago   |
| <input type="checkbox"/> | DOT                      | 2 years ago  |
| <input type="checkbox"/> | Downloads                | 18 hours ago |



Home × +

localhost:8888/tree#running

jupyter Logout

Files Running Clusters Nbextensions

Currently running Jupyter processes

Terminals ▾ There are no terminals running.

Notebooks ▾ NSS/jumpstart/jumpstart\_crimes.ipynb Python 3 Shutdown seconds ago



Home

localhost:8888/tree#notebooks

jupyter

Logout

Files    Running    Clusters    Nbextensions

Select items to perform actions on them.

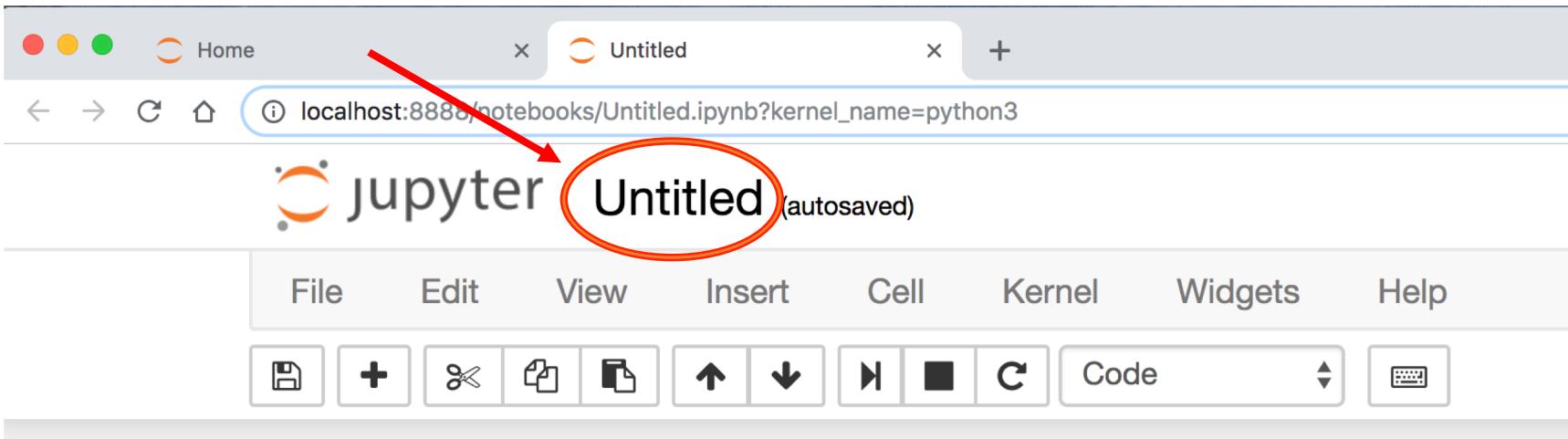
Upload    New ▾   

Notebook:

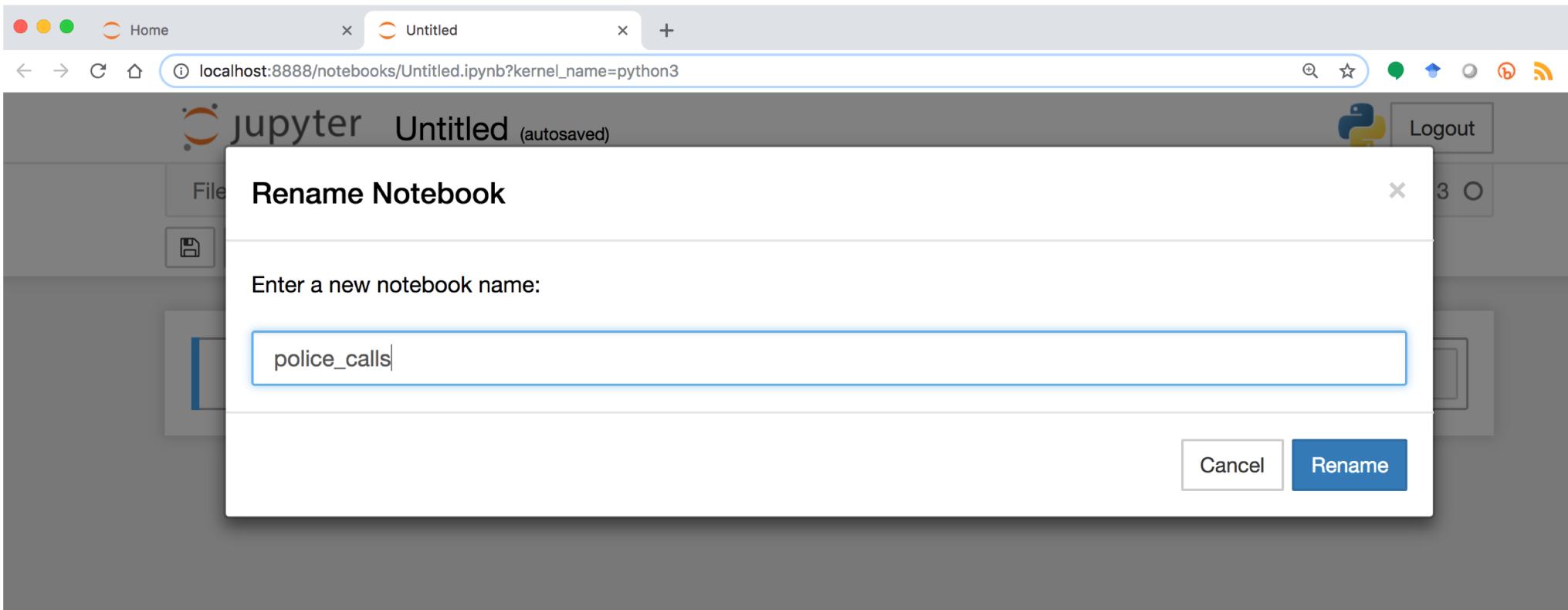
- Python 3
- R
- Other:
- Text File
- Folder
- Terminal

a year ago





- meaningful
- no spaces





Untitled (autosaved)

run cell (shift + enter)



Logout

File

Edit

View

Insert

Cell

Kernel

Widgets

Help

Trusted

Python 3



Code



save add cell cut cell

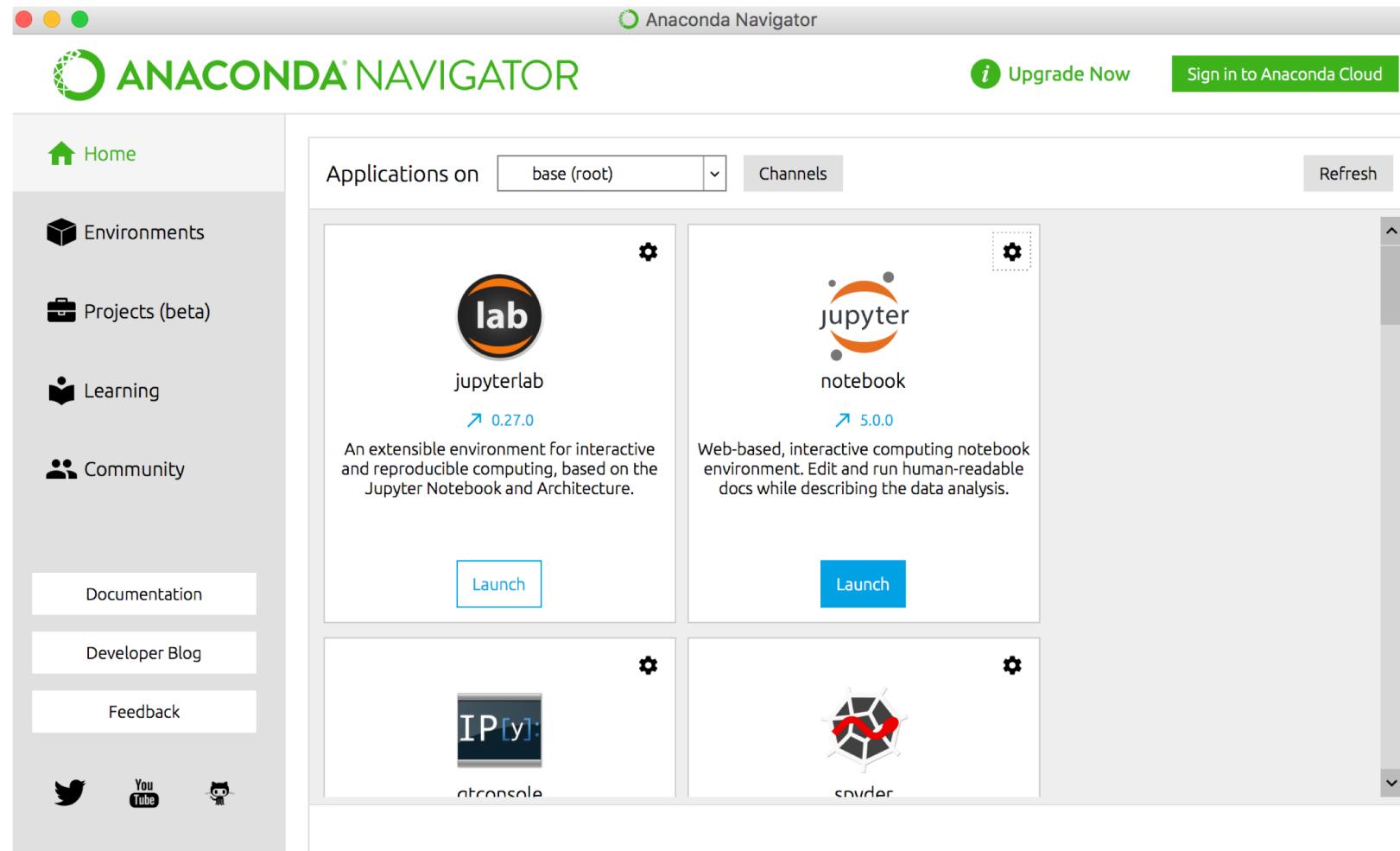
move cell (up/down)

toggle between markdown and code

In [ ]:



# Open Anaconda Navigator and launch Jupyter





jupyter police\_calls (autosaved)



Logout

File Edit View Insert Cell

Kernel

Widgets

Help

Trusted

Python 3



Interrupt

Restart

Restart & Clear Output

Restart & Run All

Reconnect

Shutdown

Change kernel ▶

In [1]:

```
import pandas as pd
import folium
import matplotlib.pyplot as plt
import seaborn as sns
import numpy as np
import sqlite3 as sql

%matplotlib inline
```

In [ ]:





File Edit View Insert Cell Kernel Widgets Help

Trusted | Python 3



Markdown

## #### Jumpstart Course - Analysis of Nashville Police Calls



Code

## Jumpstart Course - Analysis of Nashville Police Calls

```
In [1]: import pandas as pd  
import folium  
import matplotlib.pyplot as plt  
import seaborn as sns  
import numpy as np  
import sqlite3 as sql  
  
%matplotlib inline
```

**Next up:**

- walk through analysis guide

