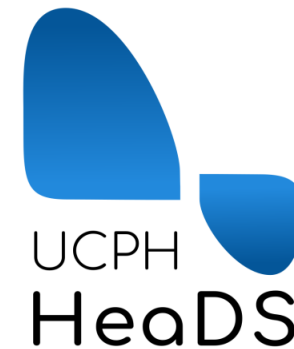
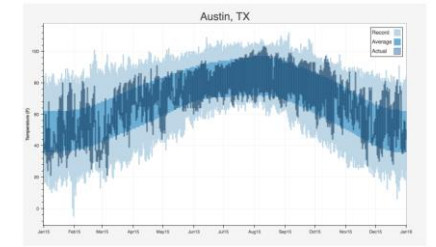
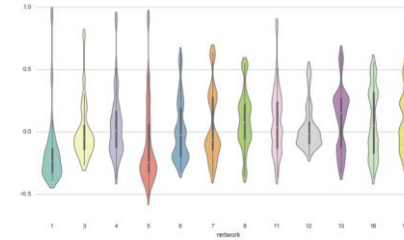
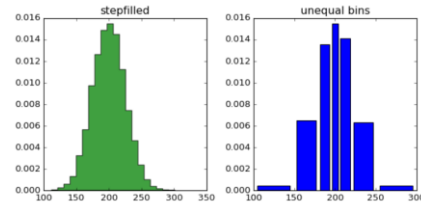
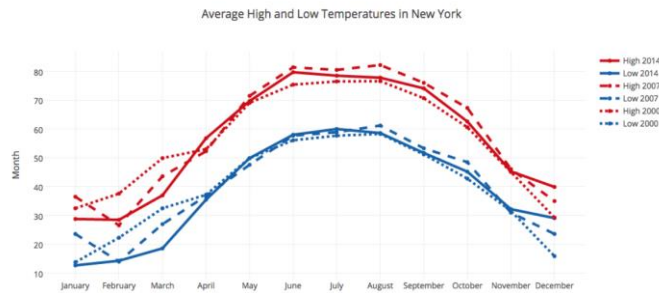


Python Tsunami

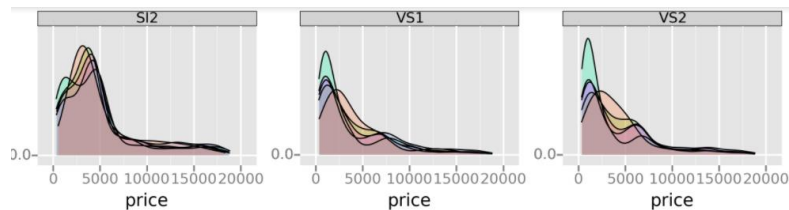
– June 7th-9th –





Visualizing Data with Python

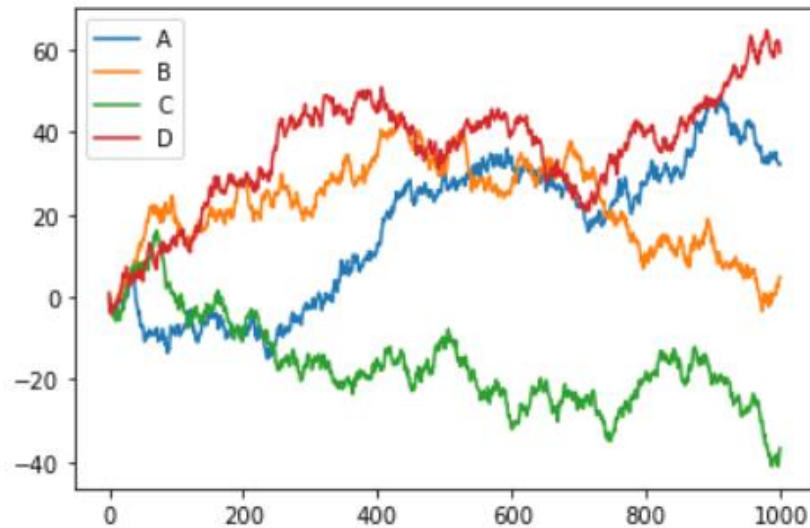
- Multiple Options (maybe too many)
 - **Matplotlib** (<https://matplotlib.org/>)
 - **Seaborn** (<https://seaborn.pydata.org/>)
 - **plotnine** (ggplot-like) (<https://plotnine.readthedocs.io>)
 - **Bokeh** (<https://bokeh.org/>)
 - **Altair** (<https://altair-viz.github.io/>)
 - **Plotly** (<https://plotly.com/python/>)



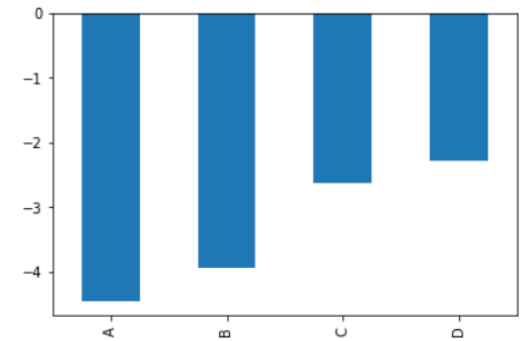
Also - Pandas

https://pandas.pydata.org/pandas-docs/stable/user_guide/visualization.html

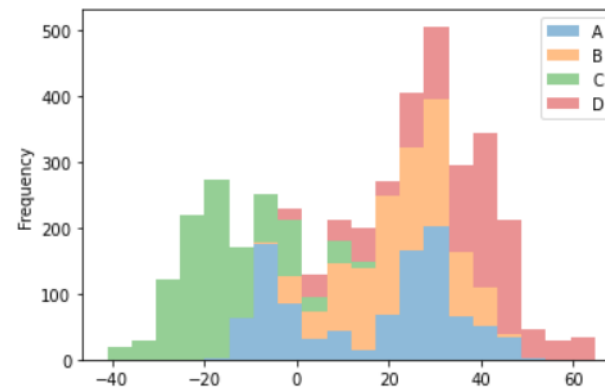
`df.plot()`



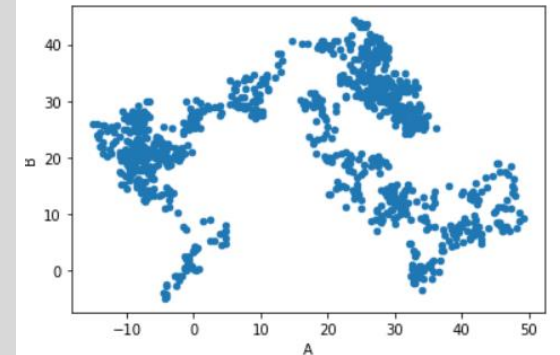
`df.iloc[2].plot.bar()`



`df.plot.hist(stacked=True, bins=20, alpha=0.5)`



`df.plot.scatter(x, y)`

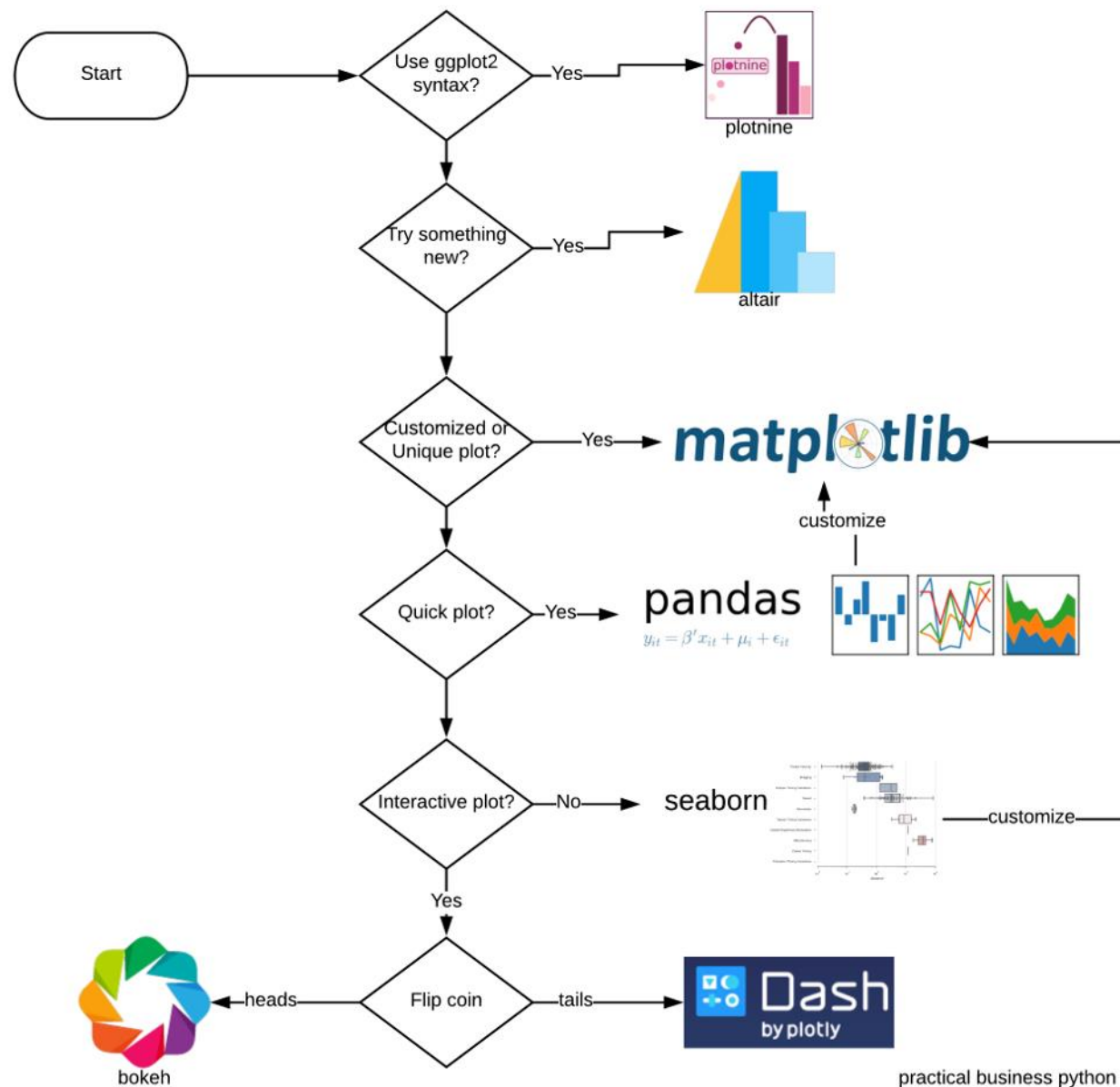


```
from plotnine.data import economics
from plotnine import ggplot, aes, geom_line
```

```
(
    ggplot(economics) # What data to use
    + aes(x="date", y="pop") # What variable to use
    + geom_line() # Geometric object to use for drawing
)
```

How Do you Pick One?

Choosing a python visualization tool

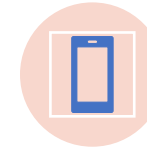


We Chose Plotly

<https://plotly.com/python/>



Works well
with Pandas



Easy to use



Publication-
ready



Interactive



Works with
other
languages

<https://plotly.com/r/>

 Open in Colab

However, We
Provide a
Matplotlib
Notebook

matplotlib

 Open in Colab

