## Pandas!

- Library
  - a collection of code that makes everyday tasks more efficient
  - Pandas library: https://pandas.pydata.org/
- Dataframes
  - Object that is used to store a dataset
  - Information is organized in rows and columns
  - Simplify common operations like sorting data
- Series
  - Object used to create dataframes
  - Seen as a one-dimensional list of data
  - Single column in a dataframe
  - Like a list
- Indexing
  - df.loc[]
    - Name location
    - df.loc[row\_label, col\_label]
  - df.iloc[]
    - Integer location
    - df.iloc[row\_index, col\_index]
- Selection
  - The process of accessing a subset of a dataframe. You can select subsets using df.loc[] and df.iloc[]
- Filtering
  - Selecting values of a dataset where certain conditions are true
  - Df[condition]

## **Combining Data Frames**

- Concatenate
  - Naively combines along an axis
  - Just squish together
- Merge
  - Combine through shared column
- Join
  - Combine using shared indices