DataFrames

- A pandas object that is used to store a dataset
- Information is organized in rows and columns
- Dataframes simplify common operations, like sorting data

Series

- A pandas object used to create dataframes
- Seen as a one-dimensional of data
 - o Think of

```
Constructing Series from a dictionary with an Index specified

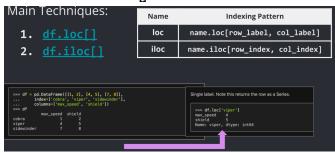
>>> d = {'a': 1, 'b': 2, 'c': 3}
>>> ser = pd.Series(data=d, index=['a', 'b', 'c'])
>>> ser
a 1
b 2
c 3
dtype: int64

Constructing Series from a list with copy=False.

>>> r = [1, 2]
>>> ser = pd.Series(r, copy=False)
>>> ser.lloc[e] = 999
1 2
dtype: int64
```

Indexing into Dataframes

- Main Techniques:
 - o df.loc[]
 - o Df.iloc[]



Selection

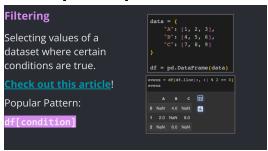
• The process of accessing a subset of a dataframe. You can select subsets using loc and iloc.



Filtering

• Selecting values of a dataset where certain conditions are true

• df[condition]



Combining Data Frames

- Three techniques
 - o Concatenate: naively combines along an axis
 - Merge: Combine through shared column
 - Join: Combine using shared indices

