**### Part 3: Pandas Cheat Sheet**

1. Create a cheet sheet on Pandas basics that covers the following:

   - Summarize Pandas

     - What are they and how are they different from the other object types we have worked with so far

     - How to make a pandas dataframe from scratch & by reading in a csv

     - How to slice pandas dataframes -- both using loc and iloc

     - What is the index of a pandas dataframe -- why is is different than other columns and how can you work with it?

     - Key methods associated with pandas dataframes

     - Key attributes associated with pandas dataframes

   - Summarize any additional functions you have found helpful for working with dataframes

2. Submit your cheat sheet to me in the `cheat\_sheets` folder of your `homework-githubname` repo. Name your file `lastname\_CS4\_Pandas`

* 1. What are they and how are they different from the other object types we have worked with so far

Pandas can analysis different type of data (dataframe, xarray, array, et al.)

* 1. How to make a pandas dataframe from scratch & by reading in a csv

pd.read\_csv('data.csv')

data = pd.DataFrame(np.array([[1, 2, 3], [4, 5, 6], [7, 8, 9]]), columns=['a', 'b', 'c'])

data = pd.read\_table(filepath, sep='\t', skiprows=30,

                     names=['agency\_cd', 'site\_no',

                            'datetime', 'flow', 'code'],

                     parse\_dates=['datetime'], index\_col='datetime'

                     )

* 1. How to slice pandas dataframes -- both using loc and iloc

Graphical user interface, text, application, email

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Iloc: use number;

Loc: use name or index.label.

* 1. What is the index of a pandas dataframe -- why is is different than other columns and how can you work with it?

Index is a list of number or label. It doesn’t have column number so. We can use data.index to work with it

* 1. Key methods associated with pandas dataframes

.set\_index()

.head()/.tail()

.groupby()

.sort\_value()

* 1. Key attributes associated with pandas dataframes

.index

And

.column

* 1. Summarize any additional functions you have found helpful for working with dataframes

Text

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