

# HW - Introduction to Python

11/14/2018

## Instructions

- Use data file *va16Data4\_hw.csv* for this HW.
- save the final output file as “*va16Data4\_hw\_(your name).csv*”
- in order to see all the lines without any skips in between add the line:

```
pd.set_option('display.max_columns', None)
```

### 1. Import necessary packages

- pandas
- numpy
- datetime
- seaborn
- matplotlib.pyplot
- call *%matplotlib inline* for plots in notebook

### 2. Read the data file and set the ID as the index column.

### 3. How many rows and columns are in the data?

### 4. Examine the columns for Sex.

- i019a - Was the deceased male? - y
- i019b - Was the deceased female? - y

Examine each column using countplot and cross check between the two columns to see if there is any problem in the data. (There is a problem!)

### 5. Solve the problem found in #4

### 6. Spot a problem in the last column. Fix the problem using *split* and *apply* functions.

### 7. Are there any unusual entries from #7? Plot using the timestamps and list the unusual entries.

### 8. Examine the timestamp for the entries and find out when/how often *cronjobs* are set to run.

*Cronjob refers to the automated command to run a specific file or script at a specified time and frequency.*

### 9. Export file to a csv file named “*va16Data4\_hw\_(your\_name).csv*”