## Pandas Challenge 4

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Weekly Pandas Challenge 4 - Data In Motion

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 ${\bf Dataset: https://raw.githubusercontent.com/justmarkham/DAT8/master/data/drinks.csv} \\ {\bf Challenge\ Questions}$ 

- 1) See the first 10 entries.
- 2) Delete the columns 'Unnamed: 0' and 'Id'.
- 3) Group the dataset by name, assign to a variable called names, and sort the dataset by highest to lowest count.
- 4) How many different names exist in the dataset?
- 5) What is the name with most occurrences?
- 6) What is the standard deviation of count of names?
- 7) Get a summary of the dataset with the mean, min, max, std and quartiles.

```
[59]: import pandas as pd
baby_names = pd.read_csv('https://raw.githubusercontent.com/guipsamora/

→pandas_exercises/master/06_Stats/US_Baby_Names/US_Baby_Names_right.csv')

1)
```

## [61]: baby\_names.head(10)

```
[61]:
          Unnamed: 0
                           Ιd
                                    Name
                                           Year Gender State
                                                                 Count
                11349
                       11350
                                    Emma
                                           2004
                                                      F
                                                            AK
      1
                11350
                                 Madison
                                           2004
                                                      F
                                                            AK
                                                                    48
                       11351
                                                      F
      2
                11351
                       11352
                                  Hannah
                                           2004
                                                            AK
                                                                    46
      3
                                           2004
                                                      F
                11352
                       11353
                                   Grace
                                                            AK
                                                                    44
      4
                                                      F
                11353
                                   Emily
                                           2004
                                                            AK
                                                                    41
                       11354
      5
                11354
                       11355
                                 Abigail
                                           2004
                                                      F
                                                            AK
                                                                    37
      6
                                                      F
                11355
                                  Olivia
                       11356
                                           2004
                                                            AK
                                                                    33
      7
                                                      F
                11356
                       11357
                                Isabella
                                           2004
                                                            AK
                                                                    30
                                                      F
      8
               11357
                       11358
                                  Alyssa
                                           2004
                                                            AK
                                                                    29
                                           2004
      9
                11358
                       11359
                                  Sophia
                                                      F
                                                            AK
                                                                    28
```

```
2)
```

```
[15]: drop_columns=baby_names.drop(["Unnamed: 0","Id"], axis = 1)
      drop_columns.head(10)
[15]:
             Name
                   Year Gender State Count
      0
             Emma 2004
                             F
                                  AK
                                          62
          Madison 2004
                             F
      1
                                  AK
                                          48
                             F
           Hannah 2004
                                  AK
                                          46
      2
            Grace 2004
                             F
      3
                                  AK
                                          44
      4
            Emily 2004
                             F
                                  ΑK
                                          41
      5
          Abigail 2004
                             F
                                  ΑK
                                          37
      6
           Olivia 2004
                             F
                                  ΑK
                                          33
                             F
      7
        Isabella 2004
                                  ΑK
                                          30
      8
           Alyssa 2004
                             F
                                  ΑK
                                          29
                             F
      9
           Sophia 2004
                                  ΑK
                                          28
       3)
[53]: names = drop_columns.groupby("Name").sum()
      names.sort_values("Count", ascending = False).head()
[53]:
                   Year
                          Count
      Name
      Jacob
                1141099 242874
      Emma
                1137085 214852
     Michael
                1161152 214405
      Ethan
                1139091 209277
      Isabella 1137090 204798
       4)
[41]: diff_names = baby_names.Name.value_counts().count()
      diff_names
[41]: 17632
       5)
[54]: names.Count.idxmax()
[54]: 'Jacob'
       6)
[55]: names.Count.std()
[55]: 11006.069467891111
       7)
```

```
[56]: names.describe()
[56]:
                      Year
                                    Count
      count
             1.763200e+04
                             17632.000000
             1.158117e+05
                              2008.932169
      mean
             2.451618e+05
                             11006.069468
      std
             2.004000e+03
      min
                                 5.000000
      25%
             4.017000e+03
                                11.000000
      50%
             1.606100e+04
                                49.000000
      75%
             7.846425e+04
                               337.000000
      max
             2.233993e+06
                            242874.000000
[57]: del names['Year']
[58]: names.describe()
[58]:
                      Count
              17632.000000
      count
      mean
               2008.932169
      std
              11006.069468
                  5.000000
      min
      25%
                 11.000000
      50%
                 49.000000
      75%
                337.000000
      max
             242874.000000
 []:
```