Axis Param

November 17, 2016

```
In [1]: import pandas as pd
In [2]: drinks = pd.read_csv('http://bit.ly/drinksbycountry')
In [3]: drinks.head()
Out[3]:
                country beer_servings
                                          spirit_servings
                                                            wine_servings
        0
           Afghanistan
                                      0
                                                         0
                                                                         0
        1
                Albania
                                     89
                                                       132
                                                                        54
        2
                Algeria
                                     25
                                                         0
                                                                        14
        3
                Andorra
                                    245
                                                       138
                                                                       312
        4
                                    217
                                                        57
                                                                        45
                 Angola
           total_litres_of_pure_alcohol continent
        0
                                       0.0
                                                Asia
        1
                                       4.9
                                              Europe
        2
                                       0.7
                                              Africa
        3
                                      12.4
                                              Europe
                                       5.9
                                              Africa
In [4]: drinks.drop('continent', axis=1).head() # get rid of continent column -> ax
Out[4]:
                country beer_servings
                                         spirit_servings
                                                            wine_servings
        0
           Afghanistan
                                                         0
                                                                         0
                                      0
        1
                Albania
                                     89
                                                       132
                                                                        54
        2
                Algeria
                                     25
                                                         0
                                                                        14
        3
                                                                       312
                Andorra
                                                       138
                                    245
                                                        57
                                                                        45
                 Angola
                                    217
           total_litres_of_pure_alcohol
        0
                                       0.0
        1
                                       4.9
        2
                                       0.7
        3
                                      12.4
        4
                                       5.9
```

In [7]: drinks.drop(1, axis=0).head() # drops the first row ie Albania, displays he

```
Out [7]:
                      country beer_servings spirit_servings wine_servings
        0
                 Afghanistan
                                                                             0
                                                              0
        2
                                           25
                                                              0
                                                                            14
                      Algeria
        3
                      Andorra
                                          245
                                                            138
                                                                           312
        4
                       Angola
                                          217
                                                             57
                                                                            45
          Antigua & Barbuda
                                          102
                                                            128
                                                                            45
           total_litres_of_pure_alcohol
                                              continent
        0
                                      0.0
                                                    Asia
        2
                                      0.7
                                                  Africa
        3
                                    12.4
                                                  Europe
        4
                                      5.9
                                                  Africa
        5
                                      4.9 North America
In [8]: drinks.mean()
Out[8]: beer_servings
                                          106.160622
        spirit_servings
                                           80.994819
        wine_servings
                                           49.450777
        total_litres_of_pure_alcohol
                                            4.717098
        dtype: float64
In [9]: drinks.mean(axis=0) # assumes axis = 0
Out[9]: beer_servings
                                          106.160622
        spirit_servings
                                           80.994819
        wine_servings
                                           49.450777
                                           4.717098
        total_litres_of_pure_alcohol
        dtype: float64
In [10]: drinks.mean(axis = 1) # gives mean of each row, eg mean of rows in 0 -> As
Out[10]: 0
                  0.000
         1
                 69.975
         2
                   9.925
         3
                176.850
         4
                 81.225
         5
                 69.975
         6
                111.825
         7
                 53.700
         8
                138.850
         9
                138.675
         10
                 18.325
         11
                 88.825
         12
                 28.500
         13
                  0.000
         14
                 89.575
         15
                142.850
         16
                150.375
```

```
97.950
17
18
         13.025
19
          5.850
20
         54.950
21
         65.400
22
         62.100
23
       103.300
          8.650
24
25
       146.825
26
         10.825
27
         23.575
28
         12.250
29
         55.000
         . . .
163
         79.650
164
        24.675
165
       101.300
166
       143.800
167
        14.250
          4.325
168
         91.100
169
170
         55.725
         1.525
171
         14.575
172
173
         15.775
174
         91.600
         18.825
175
176
         20.350
         31.050
177
178
        14.250
        15.575
179
180
       124.225
181
         39.700
182
       137.600
183
        12.175
       124.925
184
185
         94.150
186
         34.100
187
         12.725
188
       110.925
189
         29.000
190
          1.525
191
         14.375
192
         22.675
dtype: float64
```

In [11]: drinks.mean(axis='index') # gives you axis as a strin

Out[11]: beer_servings 106.160622

spirit_servings 80.994819
wine_servings 49.450777
total_litres_of_pure_alcohol 4.717098
dtype: float64

In []: