addis

May 11, 2022

```
[19]: #impoerterer pakker..
      import numpy as np
      import pandas as pd
      import plotly.express as px
      #her har jeg funnet en basic og enkel pakke som heter plotly. denne er 
      \rightarrowhovedpakken til resultatene
[22]: #leser datasaett til dataframe
      df = pd.read_csv('avocado-updated-2020.csv')
      df.info()
      #her viser innholdet til priser
     <class 'pandas.core.frame.DataFrame'>
     RangeIndex: 33045 entries, 0 to 33044
     Data columns (total 13 columns):
          Column
                         Non-Null Count Dtype
          _____
                         -----
      0
          date
                         33045 non-null object
      1
          average_price 33045 non-null float64
      2
          total_volume
                         33045 non-null float64
      3
          4046
                         33045 non-null float64
      4
          4225
                         33045 non-null float64
      5
          4770
                         33045 non-null float64
      6
         total_bags
                         33045 non-null float64
      7
          small_bags
                         33045 non-null float64
          large_bags
                         33045 non-null float64
          xlarge_bags
                         33045 non-null float64
                         33045 non-null object
      10
         type
      11
          year
                         33045 non-null
                                         int64
                         33045 non-null object
         geography
     dtypes: float64(9), int64(1), object(3)
     memory usage: 3.3+ MB
[43]: #plotter en tabell som data er oppsatt.
      avocado.head()
```

```
[43]:
               date average_price total_volume
                                                         4046
                                                                       4225 \
         2015-01-04
                           1.22000
                                                   2819.50000 28287.42000
                                     40873.28000
      1 2015-01-04
                           1.79000
                                      1373.95000
                                                     57.42000
                                                                 153.88000
      2 2015-01-04
                           1.00000 435021.49000 364302.39000 23821.16000
      3 2015-01-04
                           1.76000
                                      3846.69000
                                                   1500.15000
                                                                 938.35000
      4 2015-01-04
                           1.08000 788025.06000 53987.31000 552906.04000
               4770
                      total_bags
                                   small_bags
                                               large_bags
                                                           xlarge_bags \
      0
           49.90000
                      9716.46000
                                   9186.93000
                                                529.53000
                                                               0.00000
            0.00000
      1
                      1162.65000
                                   1162.65000
                                                  0.00000
                                                               0.00000
      2
           82.15000 46815.79000 16707.15000 30108.64000
                                                               0.00000
      3
            0.00000
                      1408.19000
                                   1071.35000
                                                336.84000
                                                               0.00000
      4 39995.03000 141136.68000 137146.07000 3990.61000
                                                               0.00000
                 type year
                                        geography
      0
        conventional 2015
                                           Albany
      1
              organic 2015
                                           Albany
      2 conventional 2015
                                          Atlanta
      3
              organic 2015
                                          Atlanta
      4 conventional 2015 Baltimore/Washington
[24]: #viser katogoriserte variabler.
      print(df['type'].value_counts(dropna=False))
      print(df['geography'].value_counts(dropna=False))
     conventional
                     16524
     organic
                     16521
     Name: type, dtype: int64
     Philadelphia
                             612
     Northeast
                             612
     Syracuse
                             612
                             612
     Seattle
     San Diego
                             612
     Baltimore/Washington
                             612
     Midsouth
                             612
     Chicago
                             612
     Grand Rapids
                             612
     New York
                             612
     Houston
                             612
     Denver
                             612
     Los Angeles
                             612
     Sacramento
                             612
     Harrisburg/Scranton
                             612
     Dallas/Ft. Worth
                             612
     Buffalo/Rochester
                             612
```

612

612

Southeast

Pittsburgh

```
Atlanta
                              612
     St. Louis
                              612
     Boston
                              612
     Jacksonville
                              612
     Albany
                              612
     Cincinnati/Dayton
                              612
     Spokane
                              612
     Orlando
                              612
     Raleigh/Greensboro
                              612
     Richmond/Norfolk
                              612
     New Orleans/Mobile
                              612
     Las Vegas
                              612
                              612
     San Francisco
     Northern New England
                              612
     Phoenix/Tucson
                              612
     South Carolina
                              612
     California
                              612
     Plains
                              612
     Boise
                              612
     Indianapolis
                              612
     Detroit
                              612
     Louisville
                              612
     Tampa
                              612
     Great Lakes
                              612
     Roanoke
                              612
     Nashville
                              612
     Total U.S.
                              612
     South Central
                              612
     West
                              612
     Hartford/Springfield
                              612
     Charlotte
                              612
     Miami/Ft. Lauderdale
                              612
     Portland
                              612
     Columbus
                              612
     West Tex/New Mexico
                              609
     Name: geography, dtype: int64
[56]: #her vises første polttet. her har jeg valgt New Yourk. men kan endes veldig
      →nekelt ved å Endre på df['geography'] == 'HER'
      msk = df['geography'] == 'New York'
```

px.line(df[msk], x='date', y='average_price', color='type')



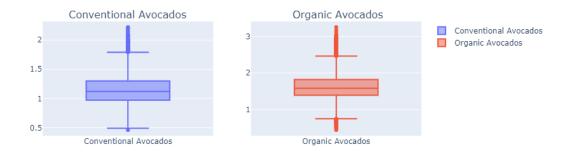
```
[31]: #Her lager jeg en Boxplot av Conventional and Organic Avocados
# der kan man se dyreste og billigste priser på Conventional and Organic
\[
\to Avocados.
\]
conventional_avocado = avocado[avocado['type']=='conventional']
organic_avocado = avocado[avocado['type']=='organic']

fig = make_subplots(rows=1, cols=2, subplot_titles=('Conventional Avocados','u
\to Organic Avocados'))

trace1 = go.Box(y=conventional_avocado['average_price'], name ='Conventional_u
\to Avocados')

trace2 = go.Box(y=organic_avocado['average_price'], name ='Organic Avocados')

fig.append_trace(trace1, row = 1, col=1)
fig.append_trace(trace2, row = 1, col=2)
fig.show()
```



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