Sathish_K_Rajendiran_Week3_Async_3.2_Data_Exploration

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3.2 Data Exploration:

Write your own program (or build on the one you wrote before) to read the NBA Attendance file

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Task: 3.2 Data Exploration
Date: 7/13/2020

[138]:
```
import os
os.getcwd()
```

[138]:
```
'/Users/sathishrajendiran/ist652-python'
```

[140]:
```
# Working with file, list and sorting
try:
    NBAfile = open ('/Users/sathishrajendiran/ist652-python/NBA-Attendance-1989.
 ↪txt', 'r')

except:
    print("Is the file in correct directory?")

# Create a dummy list
NBAlist = []

for line in NBAfile:
    textline = line.strip()
    # split the line on whitespace
    lines = textline.split()
    # add the list of items to the NBAlist
    NBAlist.append(lines)

l = len(NBAlist)

print('\n Number of lines :',l)

for line in NBAlist:
    print('>',line)
```

```
 Number of lines : 27
> ['Atlanta', '13993', '20.06']
> ['Boston', '14916', '22.54']
> ['Charlotte', '23901', '17']
> ['Chicago', '18404', '21.98']
> ['Cleveland', '16969', '19.63']
> ['Dallas', '16868', '17.05']
> ['Denver', '12668', '17.4']
> ['Detroit', '21454', '24.42']
> ['Golden_State', '15025', '17.04']
> ['Houston', '15846', '17.56']
> ['Indiana', '12885', '13.77']
> ['LA_Clippers', '11869', '21.95']
> ['LA_Lakers', '17378', '29.18']
> ['Miami', '15008', '17.6']
> ['Milwaukee', '16088', '14.08']
> ['Minnesota', '26160', '10.92']
> ['New_Jersey', '12160', '13.31']
> ['New_York', '17815', '22.7']
> ['Orlando', '15606', '20.47']
> ['Philadelphia', '14017', '19.04']
> ['Phoenix', '14114', '16.59']
> ['Portland', '12884', '22.19']
> ['Sacramento', '17014', '16.96']
> ['San_Antonio', '14722', '16.79']
> ['Seattle', '12244', '18.11']
> ['Utah', '12616', '18.41']
> ['Washington', '11565', '14.55']
```

[141]:
```python
#NBAlist[0]
team,attendance,price =NBAlist[0]

# print(team,attendance,price)

#find average attendance
attendances = []
prices = []
teams = []


for (team,attendance,price) in NBAlist:
    attendances.append(int(attendance))
    prices.append(float(price))
    teams.append(team)

# print('\n teams:',teams)
# print('\n attendances:',attendances)
```

```
# print('\n prices:',prices)
# print(teams[attendances.index(max(attendances))])

try:
    if l>0:
        if sum(attendances)>0:
            max_team = teams[attendances.index(max(attendances))]
            avg_attendance = sum(attendances)/l
            print('\n Total attendance is {:0,.0f}'.format(sum(attendances)))
            print(' Average attendance is {:0,.2f}'.format(avg_attendance))
            print('',max_team,'has reported the maximum attendance as {:0,.0f}'.
 ↪format(max(attendances)))


        if sum(prices)>0:
            max_price_team = teams[prices.index(max(prices))]
            avg_price=sum(prices)/l
            print('\n',max_price_team,'has sold the maximum ticket price at ${:
 ↪0,.2f}'.format(max(prices)))
            print(' Where as, the average price of the ticket was sold at ${:0,.
 ↪2f}'.format(avg_price))
    else:
        print("Has there been any events?")

except ValueError:
        print("Bad Data")
```

```
Total attendance is 424,189
Average attendance is 15,710.70
Minnesota has reported the maximum attendance as 26,160

LA_Lakers has sold the maximum ticket price at $29.18
Where as, the average price of the ticket was sold at $18.57
```

[ ]: