Project 1

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Github link: https://github.com/pallavipai1/Project-1-Data-science

Industry: Restaurant

Data sets considered: mcdonalds_nutrition.csv; starbucks_nutrition.csv

Problem Statement: Compare nutrient value in food served in McDonalds and Starbucks

- Loaded data frames into Pandas data frames and verified if the data frames had been loaded

```
df_m = pd.read_csv('mcdonalds_nutrition.csv')
df_s = pd.read_csv('starbucks_nutrition.csv')
```

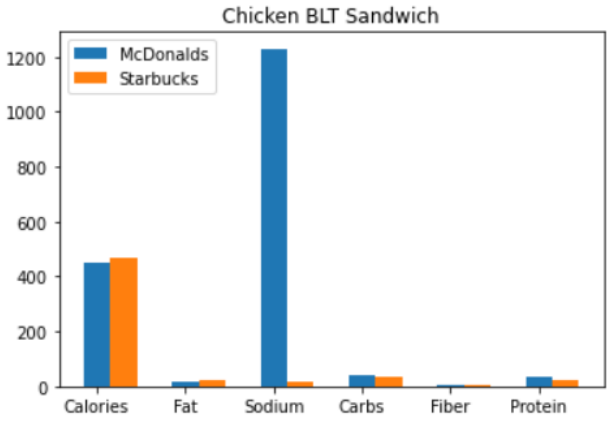
- Using dimensionality reduction converted data of higher dimensionality (mcdonalds_nutrition.csv) into lower dimensionality to (starbucks_nutrition.csv) and combined the two datasets using concat function.

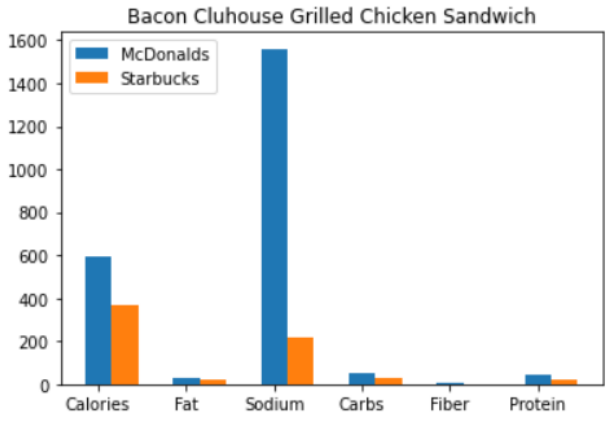
```
df_m1 = df_m[['Vendor','Item','Calories','Fat','Sodium','Carbs', 'Fiber','Protein']]

options = ['Ginger Lemonade','Orange Juice','Apple Juice','Coffee','Hazelnut Iced Cof


rslt_df = df_m1[df_m1['Item'].isin(options)]

df_s1 = df_s[['Vendor','Item','Calories','Fat','Sodium','Carbs', 'Fiber','Protein']]

rslt_df1 = df_s1[df_s1['Item'].isin(options)]
pd.concat([rslt_df,rslt_df1])
```

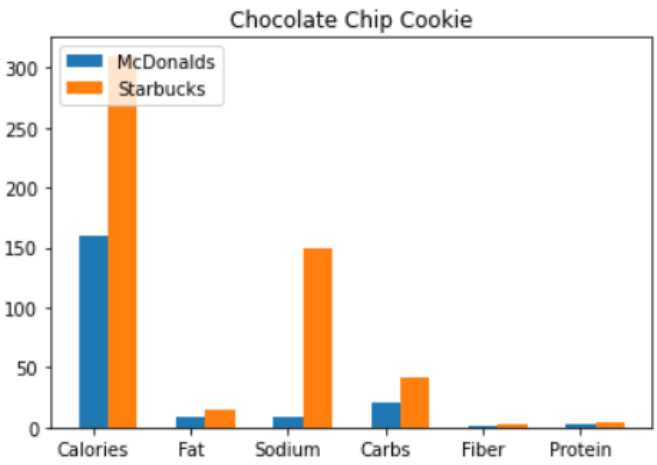
- Resulting dataset after concatenation

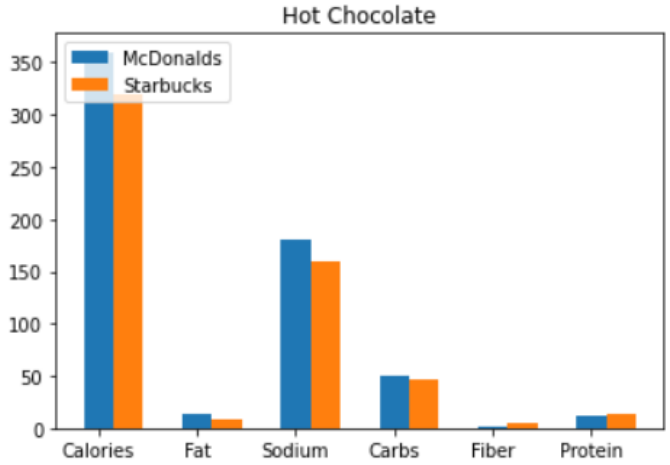
	Vendor	Item	Calories	Fat	Sodium	Carbs	Fiber	Protein
62	McDonalds	Chicken BLT Salad Sandwich	450	15.0	1230	43	3	36
64	McDonalds	Bacon Clubhouse Grilled Chicken Sandwich	590	25.0	1560	51	4	40
104	McDonalds	Chocolate Chip Cookie	160	8.0	90	21	1	2
105	McDonalds	Oatmeal Raisin Cookie	150	6.0	135	22	1	2
129	McDonalds	Ginger Lemonade	100	0.0	25	27	0	0
132	McDonalds	Apple Juice	80	0.0	15	21	0	0
133	McDonalds	Orange Juice	150	0.0	0	34	0	2
146	McDonalds	Coffee	0	0.0	0	0	0	0
190	McDonalds	Hot Chocolate	360	13.0	180	50	1	11
203	McDonalds	Hazelnut Iced Coffee	180	7.0	50	29	0	1
11	Starbucks	Chocolate Chip Cookie	310	15.0	150	42	2	4
34	Starbucks	Oatmeal Raisin Cookie	290	12.0	150	40	3	5
81	Starbucks	Bacon Clubhouse Grilled Chicken Sandwich	370	19.0	220	32	1	18
98	Starbucks	Chicken BLT Salad Sandwich	470	25.0	15	35	3	21
116	Starbucks	Ginger Lemonade	110	0.0	5	28	0	0
117	Starbucks	Coffee	0	0.0	0	0	0	0
146	Starbucks	Orange Juice	90	0.0	0	27	0	0
150	Starbucks	Hazelnut Iced Coffee	50	0.0	0	11	0	1
162	Starbucks	Apple Juice	140	0.0	10	35	0	0
175	Starbucks	Hot Chocolate	320	9.0	160	47	4	14

- Compared the nutrition value in food served in both restaurants and represented it graphically using a bar graph in python.






Chocolate Chip Cookie
McDonalds
Starbucks
300
250
200
150
100
50
0
Calories
Fat
Sodium
Carbs
Fiber
Protein


Hot Chocolate
McDonalds
Starbucks
350
300
250
200
150
100
50
0
Calories
Fat
Sodium
Carbs
Fiber
Protein