Import the necessary libraries

In [28]:
```
import pandas as pd
import numpy as np
```

Load and assign it to a variable called chipo.

In [14]:
```
url = 'https://raw.githubusercontent.com/justmarkham/DAT8/master/data/chipotle.tsv'

chipo = pd.read_csv(url, sep = '\t')
```

In [15]:
```
chipo.head()
```

Out[15]:

	order_id	quantity	item_name	choice_description	item_price
0	1	1	Chips and Fresh Tomato Salsa	NaN	$2.39
1	1	1	Izze	[Clementine]	$3.39
2	1	1	Nantucket Nectar	[Apple]	$3.39
3	1	1	Chips and Tomatillo-Green Chili Salsa	NaN	$2.39
4	2	2	Chicken Bowl	[Tomatillo-Red Chili Salsa (Hot), [Black Beans...	$16.98

Sort the dataframe chipo by item_name column

In [16]:
```
pd.DataFrame(chipo,columns = ['item_name'])
```

Out[16]:

	item_name
0	Chips and Fresh Tomato Salsa
1	Izze
2	Nantucket Nectar
3	Chips and Tomatillo-Green Chili Salsa
4	Chicken Bowl
...	...
4617	Steak Burrito
4618	Steak Burrito
4619	Chicken Salad Bowl
4620	Chicken Salad Bowl
4621	Chicken Salad Bowl

4622 rows × 1 columns

How many customers ordered Veggie Salad Bowl item?

In [29]:
```
c = np.count_nonzero(chipo.item_name == "Veggie Salad Bowl")
print(c)
```

```
18
```

How many times did someone order more than one Canned Soda?

In [31]:
```
d = np.count_nonzero((chipo.item_name == "Canned Soda") & (chipo.quantity > 1))
print(d)
```

```
20
```

New Dataset

In [32]:
```
euro12 = pd.read_csv('https://raw.githubusercontent.com/guipsamora/pandas_exercises/master/02_Filtering_%26_Sorting/Euro12/Euro_2012_stats_TEAM.csv', sep=',')
euro12.head()
```

Out[32]:

	Team	Goals	Shots on target	Shots off target	Shooting Accuracy	% Goals-to-shots	Total shots (inc. Blocked)	Hit Woodwork	Penalty goals	Penalties not scored	...	Saves made	Saves-to-shots ratio	Fouls Won	Fouls Conceded	Offs
0	Croatia	4	13	12	51.9%	16.0%	32	0	0	0	...	13	81.3%	41	62	
1	Czech Republic	4	13	18	41.9%	12.9%	39	0	0	0	...	9	60.1%	53	73	
2	Denmark	4	10	10	50.0%	20.0%	27	1	0	0	...	10	66.7%	25	38	
3	England	5	11	18	50.0%	17.2%	40	0	0	0	...	22	88.1%	43	45	
4	France	3	22	24	37.9%	6.5%	65	1	0	0	...	6	54.6%	36	51	

5 rows × 35 columns

In [33]:
```
euro12.shape
```

Out[33]:
```
(16, 35)
```

Set Team columns as index in euro dataframe

In [55]:
```
euro12.set_index('Team')
```

Out[55]:

Team	Goals	Shots on target	Shots off target	Shooting Accuracy	% Goals-to-shots	Total shots (inc. Blocked)	Hit Woodwork	Penalty goals	Penalties not scored	Headed goals	...	Saves made	Saves-to-shots ratio	Fouls Won	Fo Conce
Croatia	4	13	12	51.9%	16.0%	32	0	0	0	2	...	13	81.3%	41	
Czech Republic	4	13	18	41.9%	12.9%	39	0	0	0	0	...	9	60.1%	53	
Denmark	4	10	10	50.0%	20.0%	27	1	0	0	3	...	10	66.7%	25	
England	5	11	18	50.0%	17.2%	40	0	0	0	3	...	22	88.1%	43	
France	3	22	24	37.9%	6.5%	65	1	0	0	0	...	6	54.6%	36	
Germany	10	32	32	47.8%	15.6%	80	2	1	0	2	...	10	62.6%	63	
Greece	5	8	18	30.7%	19.2%	32	1	1	1	0	...	13	65.1%	67	
Italy	6	34	45	43.0%	7.5%	110	2	0	0	2	...	20	74.1%	101	
Netherlands	2	12	36	25.0%	4.1%	60	2	0	0	0	...	12	70.6%	35	
Poland	2	15	23	39.4%	5.2%	48	0	0	0	1	...	6	66.7%	48	
Portugal	6	22	42	34.3%	9.3%	82	6	0	0	2	...	10	71.5%	73	
Republic of Ireland	1	7	12	36.8%	5.2%	28	0	0	0	1	...	17	65.4%	43	
Russia	5	9	31	22.5%	12.5%	59	2	0	0	1	...	10	77.0%	34	
Spain	12	42	33	55.9%	16.0%	100	0	1	0	2	...	15	93.8%	102	
Sweden	5	17	19	47.2%	13.8%	39	3	0	0	1	...	8	61.6%	35	
Ukraine	2	7	26	21.2%	6.0%	38	0	0	0	2	...	13	76.5%	48	

16 rows × 34 columns

Filter teams that scored more than 6 goals

In [42]:
```
euro12[(euro12.Goals>6)]
```

Out[42]:

	Team	Goals	Shots on target	Shots off target	Shooting Accuracy	% Goals-to-shots	Total shots (inc. Blocked)	Hit Woodwork	Penalty goals	Penalties not scored	...	Saves made	Saves-to-shots ratio	Fouls Won	Fouls Conceded	Off
5	Germany	10	32	32	47.8%	15.6%	80	2	1	0	...	10	62.6%	63	49	
13	Spain	12	42	33	55.9%	16.0%	100	0	1	0	...	15	93.8%	102	83	

2 rows × 35 columns

Filter ['Denmark','Germany','Italy'] teams and ['Goals','Blocks'] columns from euro dataframe

In [60]:
```
euro12 = pd.DataFrame(index = ['Denmark','Germany','Italy'],columns = ['Goals','Blocks'])
print(euro12)
```

```
        Goals Blocks
Denmark   NaN    NaN
Germany   NaN    NaN
Italy     NaN    NaN
```

Present only the Shooting Accuracy from England, Italy and Russia

In [49]:
```
euro12.loc[euro12.Team.isin(['England','Italy','Russia']), ['Team','Shooting Accuracy']]
```

Out[49]:

	Team	Shooting Accuracy
3	England	50.0%
7	Italy	43.0%
12	Russia	22.5%

Select every row up to the 5th row and all columns

In [54]:
```
euro12.iloc[0:5,:]
```

Out[54]:

	Team	Goals	Shots on target	Shots off target	Shooting Accuracy	% Goals-to-shots	Total shots (inc. Blocked)	Hit Woodwork	Penalty goals	Penalties not scored	...	Saves made	Saves-to-shots ratio	Fouls Won	Fouls Conceded	Offs
0	Croatia	4	13	12	51.9%	16.0%	32	0	0	0	...	13	81.3%	41	62	
1	Czech Republic	4	13	18	41.9%	12.9%	39	0	0	0	...	9	60.1%	53	73	
2	Denmark	4	10	10	50.0%	20.0%	27	1	0	0	...	10	66.7%	25	38	
3	England	5	11	18	50.0%	17.2%	40	0	0	0	...	22	88.1%	43	45	
4	France	3	22	24	37.9%	6.5%	65	1	0	0	...	6	54.6%	36	51	

5 rows × 35 columns

Select all rows and columns from 0 to 7

In [52]:
```
euro12.iloc[:,0:8]
```

Out[52]:

	Team	Goals	Shots on target	Shots off target	Shooting Accuracy	% Goals-to-shots	Total shots (inc. Blocked)	Hit Woodwork
0	Croatia	4	13	12	51.9%	16.0%	32	0
1	Czech Republic	4	13	18	41.9%	12.9%	39	0
2	Denmark	4	10	10	50.0%	20.0%	27	1
3	England	5	11	18	50.0%	17.2%	40	0
4	France	3	22	24	37.9%	6.5%	65	1
5	Germany	10	32	32	47.8%	15.6%	80	2
6	Greece	5	8	18	30.7%	19.2%	32	1
7	Italy	6	34	45	43.0%	7.5%	110	2
8	Netherlands	2	12	36	25.0%	4.1%	60	2
9	Poland	2	15	23	39.4%	5.2%	48	0
10	Portugal	6	22	42	34.3%	9.3%	82	6
11	Republic of Ireland	1	7	12	36.8%	5.2%	28	0
12	Russia	5	9	31	22.5%	12.5%	59	2
13	Spain	12	42	33	55.9%	16.0%	100	0
14	Sweden	5	17	19	47.2%	13.8%	39	3
15	Ukraine	2	7	26	21.2%	6.0%	38	0

In [ ]: