Drawing Conclusions Quiz

Use the space below to explore `store_data.csv` to answer the quiz questions below.

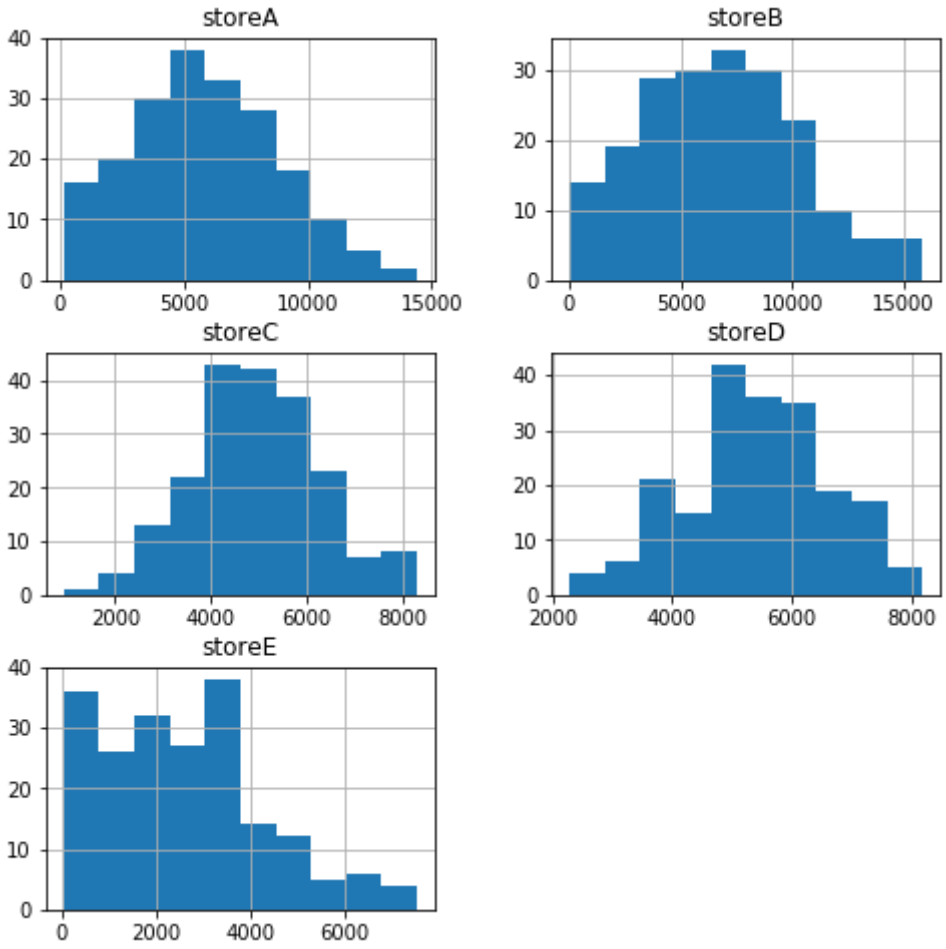
In [1]:
```
# imports and load data
import pandas as pd
% matplotlib inline

df = pd.read_csv('store_data.csv')
df.head()
```

Out[1]:

	week	storeA	storeB	storeC	storeD	storeE
0	2014-05-04	2643	8257	3893	6231	1294
1	2014-05-11	6444	5736	5634	7092	2907
2	2014-05-18	9646	2552	4253	5447	4736
3	2014-05-25	5960	10740	8264	6063	949
4	2014-06-01	7412	7374	3208	3985	3023

In [2]:
```
# explore data
df.hist(figsize=(8, 8));
```



In [3]:
```
df.tail(20)
```

Out[3]:

	week	storeA	storeB	storeC	storeD	storeE
180	2017-10-15	8556	11984	4792	5995	2508
181	2017-10-22	3751	697	3990	4236	360
182	2017-10-29	4997	9759	4290	4568	2393
183	2017-11-05	12785	1800	6163	5157	578
184	2017-11-12	137	12261	5455	7695	2599
185	2017-11-19	9960	8529	4501	7631	505
186	2017-11-26	6866	5011	5401	4736	3232
187	2017-12-03	5179	3850	6121	6778	113
188	2017-12-10	9348	5624	5446	5448	227
189	2017-12-17	5310	8647	5680	7049	3578
190	2017-12-24	8976	9503	6240	3882	2890
191	2017-12-31	11875	1527	6711	5265	1701
192	2018-01-07	8978	11312	4158	5019	3842
193	2018-01-14	6963	4014	4215	7153	3097
194	2018-01-21	5553	3971	3761	6255	3071
195	2018-01-28	282	6351	7759	5558	1028
196	2018-02-04	4853	6503	4187	5956	1458
197	2018-02-11	9202	3677	4540	6186	243
198	2018-02-18	3512	7511	4151	5596	3501
199	2018-02-25	7560	6904	3569	5045	2585

In [4]:
```
# total sales for the last month
df.iloc[196:, 1:].sum()
```

Out[4]:
```
storeA    25127
storeB    24595
storeC    16447
storeD    22783
storeE     7787
dtype: int64
```

In [5]:
```
# average sales
df.mean()
```

Out[5]:
```
storeA    5865.480
storeB    6756.710
storeC    4942.105
storeD    5431.405
storeE    2580.025
dtype: float64
```

In [6]:
```
# sales on march 13, 2016
df[df['week'] == '2016-03-13']
```

Out[6]:

	week	storeA	storeB	storeC	storeD	storeE
97	2016-03-13	2054	1390	5112	5513	2536

In [7]:
```
# worst week for store C
df[df['storeC'] == df['storeC'].min()]
```

Out[7]:

	week	storeA	storeB	storeC	storeD	storeE
9	2014-07-06	8567	3228	927	3277	168

In [8]:
```
# total sales during most recent 3 month period
last_three_months = df[df['week'] >= '2017-12-01']
last_three_months.iloc[:, 1:].sum()  # exclude sum of week column
```

Out[8]:
```
storeA    87591
storeB    79394
storeC    66538
storeD    75190
storeE    27334
dtype: int64
```