In [1]:
```
import pandas as pd
```

In [12]:
```
coal = pd.read_excel('coalpublic2013.xls')
prod = pd.DataFrame(coal['Production (short tons)'])
max_coal = prod.max()
min_coal = prod.min()
mean_coal = prod.mean()
print('max: ',max_coal)
print('min: ',min_coal)
print('mean: ',mean_coal)
```

```
max:  Production (short tons)    111005549
dtype: int64
min:  Production (short tons)    0
dtype: int64
mean:  Production (short tons)    679201.226897
dtype: float64
```

In [59]:
```
employee = pd.read_excel('employee.xlsx')
mask=employee['hire_date'].dt.year==2005
hired05 = employee[mask]
hired05
```

Out[59]:

	emp_id	first_name	last_name	hire_date
1	101	Neena	Kochhar	2005-09-21
5	105	David	Austin	2005-06-25
10	110	John	Chen	2005-09-28
11	111	Ismael	Sciarra	2005-09-30
16	116	Shelli	Baida	2005-12-24
17	117	Sigal	Tobias	2005-07-24

In [86]:
```
db = pd.read_csv('https://raw.githubusercontent.com/mwaskom/seaborn-data/master/diam
mask= db['x']>5
mask1 = db['y']>5
mask2 = db['z']>5
big= db[mask & mask1 & mask2]
big
```

Out[86]:

	carat	cut	color	clarity	depth	table	price	x	y	z
11778	1.83	Fair	J	I1	70.0	58.0	5083	7.34	7.28	5.12
13002	2.14	Fair	J	I1	69.4	57.0	5405	7.74	7.70	5.36
13118	2.15	Fair	J	I1	65.5	57.0	5430	8.01	7.95	5.23
13562	1.96	Fair	F	I1	66.6	60.0	5554	7.59	7.56	5.04
13757	2.22	Fair	J	I1	66.7	56.0	5607	8.04	8.02	5.36
...	...	...	...	...	...	...	...	...	...	...
27748	2.00	Very Good	G	SI1	63.5	56.0	18818	7.90	7.97	5.04
27749	2.29	Premium	I	VS2	60.8	60.0	18823	8.50	8.47	5.16

	carat	cut	color	clarity	depth	table	price	x	y	z
48410	0.51	Very Good	E	VS1	61.8	54.7	1970	5.12	5.15	31.80
49189	0.51	Ideal	E	VS1	61.8	55.0	2075	5.15	31.80	5.12
49905	0.50	Very Good	G	VVS1	63.7	58.0	2180	5.01	5.04	5.06

1457 rows × 10 columns

In [89]:

```
mask=db['cut']=='Premium'
mask1=db['cut']=='Ideal'
top = db[mask | mask1]
top
```

Out[89]:

	carat	cut	color	clarity	depth	table	price	x	y	z
0	0.23	Ideal	E	SI2	61.5	55.0	326	3.95	3.98	2.43
1	0.21	Premium	E	SI1	59.8	61.0	326	3.89	3.84	2.31
3	0.29	Premium	I	VS2	62.4	58.0	334	4.20	4.23	2.63
11	0.23	Ideal	J	VS1	62.8	56.0	340	3.93	3.90	2.46
12	0.22	Premium	F	SI1	60.4	61.0	342	3.88	3.84	2.33
...	...	...	...	...	...	...	...	...	...	...
53931	0.71	Premium	F	SI1	59.8	62.0	2756	5.74	5.73	3.43
53934	0.72	Premium	D	SI1	62.7	59.0	2757	5.69	5.73	3.58
53935	0.72	Ideal	D	SI1	60.8	57.0	2757	5.75	5.76	3.50
53938	0.86	Premium	H	SI2	61.0	58.0	2757	6.15	6.12	3.74
53939	0.75	Ideal	D	SI2	62.2	55.0	2757	5.83	5.87	3.64

35342 rows × 10 columns