In [1]:

```
import pandas as pd
```

In [2]:

```
df = pd.read_csv('P1-OfficeSupplies.csv')
df
```

Out[2]:

	OrderDate	Region	Rep	Item	Units	Unit Price
0	4-Jul-14	East	Richard	Pen Set	62	4.99
1	12-Jul-14	East	Nick	Binder	29	1.99
2	21-Jul-14	Central	Morgan	Pen Set	55	12.49
3	29-Jul-14	East	Susan	Binder	81	19.99
4	7-Aug-14	Central	Matthew	Pen Set	42	23.95
5	15-Aug-14	East	Richard	Pencil	35	4.99
6	24-Aug-14	West	James	Desk	3	275.00
7	1-Sep-14	Central	Smith	Desk	2	125.00
8	10-Sep-14	Central	Bill	Pencil	7	1.29
9	18-Sep-14	East	Richard	Pen Set	16	15.99
10	27-Sep-14	West	James	Pen	76	1.99
11	5-Oct-14	Central	Morgan	Binder	28	8.99
12	14-Oct-14	West	Thomas	Binder	57	19.99
13	22-Oct-14	East	Richard	Pen	64	8.99
14	31-Oct-14	Central	Rachel	Pencil	14	1.29
15	8-Nov-14	East	Susan	Pen	15	19.99
16	17-Nov-14	Central	Alex	Binder	11	4.99
17	25-Nov-14	Central	Matthew	Pen Set	96	4.99
18	4-Dec-14	Central	Alex	Binder	94	19.99
19	12-Dec-14	Central	Smith	Pencil	67	1.29
20	21-Dec-14	Central	Rachel	Binder	28	4.99
21	29-Dec-14	East	Susan	Pen Set	74	15.99
22	6-Jan-15	East	Richard	Pencil	95	1.99
23	15-Jan-15	Central	Bill	Binder	46	8.99
24	23-Jan-15	Central	Matthew	Binder	50	19.99
25	1-Feb-15	Central	Smith	Binder	87	15.00
26	9-Feb-15	Central	Alex	Pencil	36	4.99
27	18-Feb-15	East	Richard	Binder	4	4.99
28	26-Feb-15	Central	Bill	Pen	27	19.99
29	7-Mar-15	West	James	Binder	7	19.99
30	15-Mar-15	West	James	Pencil	56	2.99
31	24-Mar-15	Central	Alex	Pen Set	50	4.99
32	1-Apr-15	East	Richard	Binder	60	4.99

	OrderDate	Region	Rep	Item	Units	Unit Price
33	10-Apr-15	Central	Rachel	Pencil	66	1.99
34	18-Apr-15	Central	Rachel	Pencil	75	1.99
35	27-Apr-15	East	Nick	Pen	96	4.99
36	5-May-15	Central	Alex	Pencil	90	4.99
37	14-May-15	Central	Bill	Pencil	53	1.29
38	22-May-15	West	Thomas	Pencil	32	1.99
39	31-May-15	Central	Bill	Binder	80	8.99
40	8-Jun-15	East	Richard	Binder	60	8.99
41	17-Jun-15	Central	Matthew	Desk	5	125.00
42	25-Jun-15	Central	Morgan	Pencil	90	4.99

In [16]:

```
df.groupby('Region')['Units'].sum()
```

Out[16]:

```
Region
Central    1199
East        691
West        231
Name: Units, dtype: int64
```

In [18]:

```
d = df['Unit Price'].describe()
print(d)
```

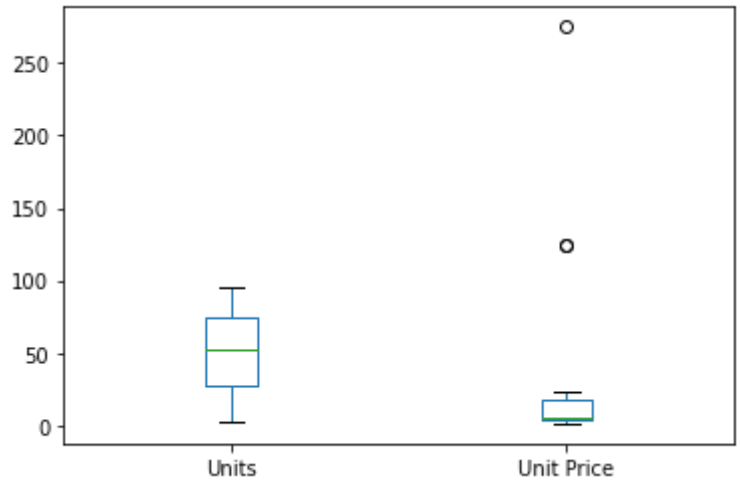
```
count     43.000000
mean      20.308605
std       47.345118
min        1.290000
25%        3.990000
50%        4.990000
75%       17.990000
max      275.000000
Name: Unit Price, dtype: float64
```

In [19]:

```
df.plot.box(d)
```

Out[19]:

```
<matplotlib.axes._subplots.AxesSubplot at 0x23739c564f0>
```



In [22]:

```
d1 = df.sort_values(['Units'],ascending = False).head(3)
d1['OrderDate']
```

Out[22]:

```
17    25-Nov-14
35    27-Apr-15
22     6-Jan-15
Name: OrderDate, dtype: object
```

In [23]:

```
d2 = df.sort_values(['Units'],ascending = True).groupby('Rep').head(1)
d2['Rep'].head(3)
```

Out[23]:

```
7       Smith
6       James
27    Richard
Name: Rep, dtype: object
```

In [36]:

```
d3 = df[df['Rep'] == 'Richard']
d3.groupby('Item')['Units'].sum()
```

Out[36]:

```
Item
Binder     124
Pen         64
Pen Set     78
Pencil     130
Name: Units, dtype: int64
```

In [ ]:

```

```