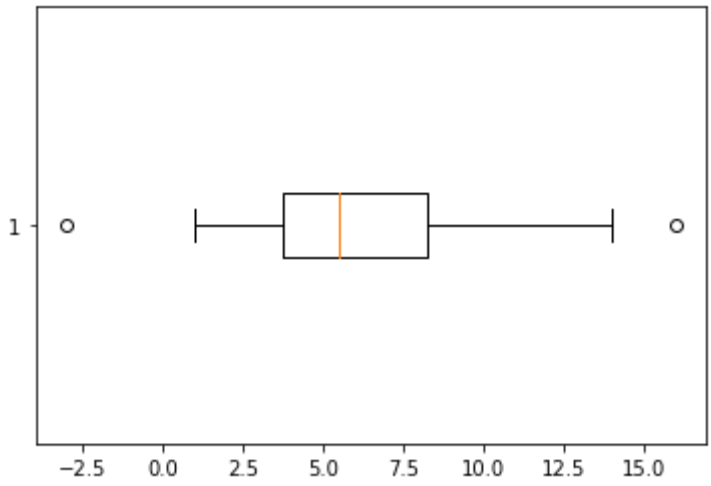
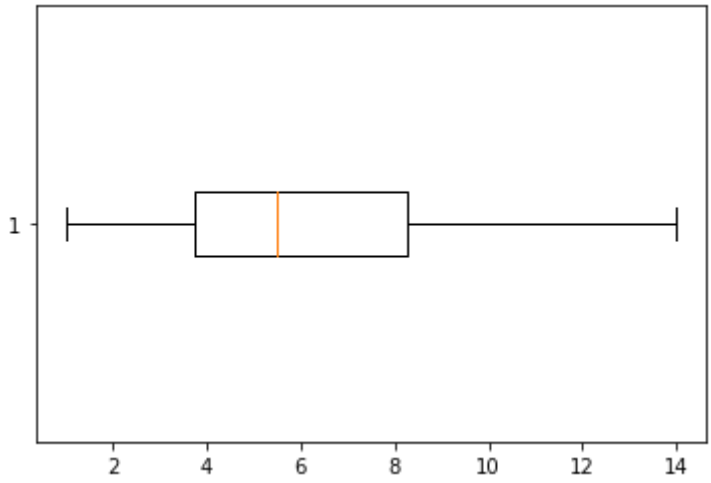
In [5]:

```
import matplotlib.pyplot as plt
from matplotlib.pyplot import boxplot, show   #libraries req for boxplot
import numpy as np

values = [2, 3, 4, 1, -3.04, 5, 4, 6, 7, 2, 4, 6, 8, 6 , 9, 12, 14, 11, 5, 16]   #da

plt.boxplot(values, vert=False)    #simple way to create a boxplot
plt.show()
```



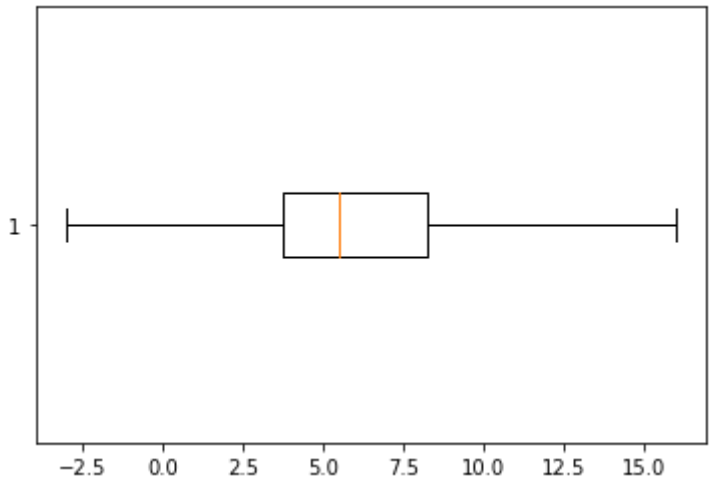
In [6]:

```
plt.boxplot(values, showfliers=False, vert=False)   #to remove all the outliers
plt.show()
```



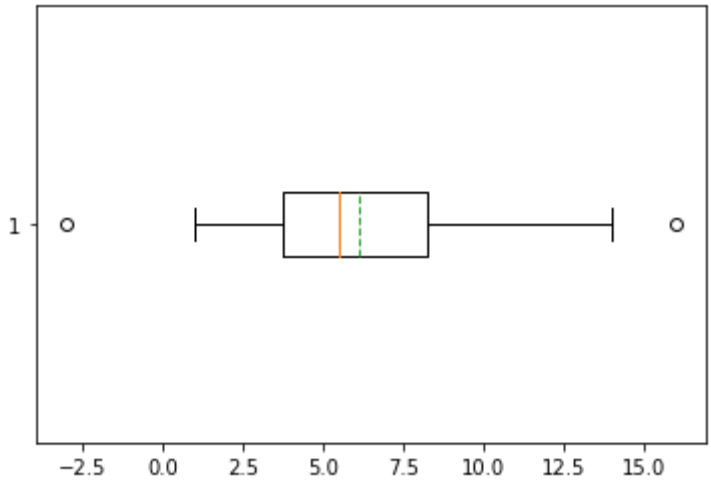
In [7]:

```
#plt.boxplot(values, whis='range', vert=False)   #to consider all the outliers under
plt.boxplot(values, whis=100, vert=False)
plt.show()
```



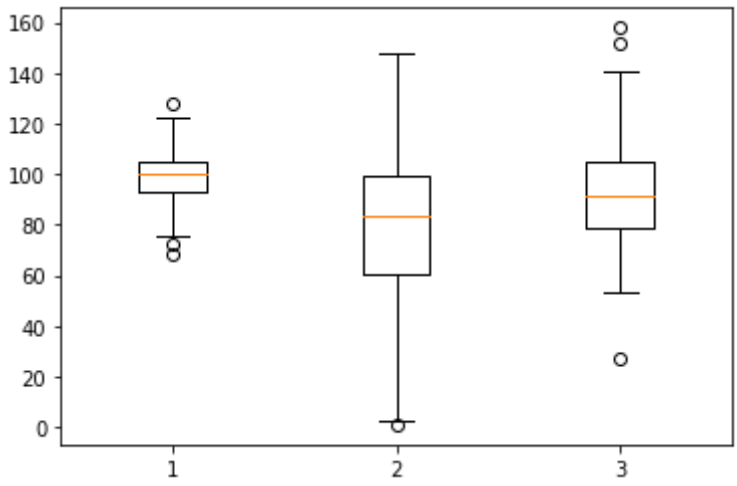
In [8]:

```
plt.boxplot(values, meanline=True, showmeans=True, vert=False)   #to show the mean o
plt.show()
```



In [9]:

```
#to plot multiple boxplots in one plane
collectn_1 = np.random.normal(100, 10, 200)   #randowm generatiion of datapoints
collectn_2 = np.random.normal(80, 30, 200)
collectn_3 = np.random.normal(90, 20, 200)
values = [collectn_1, collectn_2, collectn_3]    #list of lists of datapoints
plt.boxplot(values)
plt.show()
```



In [10]:

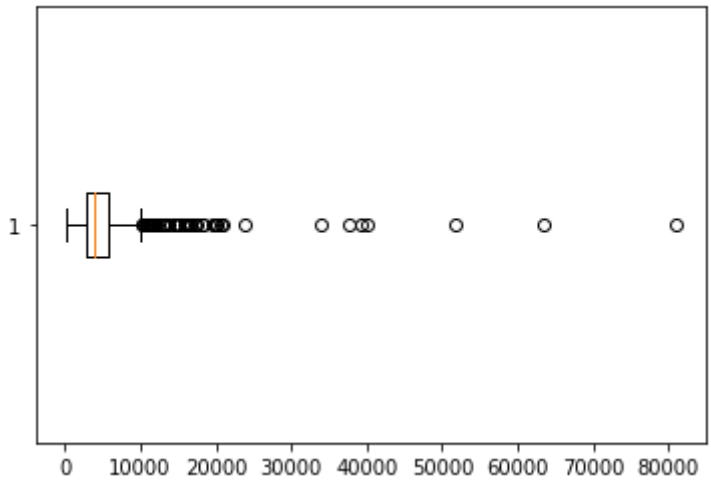
```
import pandas as pd
import numpy as np
```

```
import matplotlib.pyplot as plt
%matplotlib inline
import statistics as st

df = pd.read_csv("C:\\Users\\Suresh Jamadagni\\downloads\\train.csv")
print(df)
```

```
      Loan_ID  Gender Married Dependents     Education Self_Employed  \
0    LP001002    Male      No          0      Graduate            No
1    LP001003    Male     Yes          1      Graduate            No
2    LP001005    Male     Yes          0      Graduate           Yes
3    LP001006    Male     Yes          0  Not Graduate            No
4    LP001008    Male      No          0      Graduate            No
..        ...     ...     ...        ...           ...           ...
609  LP002978  Female      No          0      Graduate            No
610  LP002979    Male     Yes         3+      Graduate            No
611  LP002983    Male     Yes          1      Graduate            No
612  LP002984    Male     Yes          2      Graduate            No
613  LP002990  Female      No          0      Graduate           Yes

     ApplicantIncome  CoapplicantIncome  LoanAmount  Loan_Amount_Term  \
0               5849                0.0         NaN             360.0
1               4583             1508.0       128.0             360.0
2               3000                0.0        66.0             360.0
3               2583             2358.0       120.0             360.0
4               6000                0.0       141.0             360.0
..               ...                ...         ...               ...
609             2900                0.0        71.0             360.0
610             4106                0.0        40.0             180.0
611             8072              240.0       253.0             360.0
612             7583                0.0       187.0             360.0
613             4583                0.0       133.0             360.0

     Credit_History Property_Area Loan_Status
0               1.0         Urban           Y
1               1.0         Rural           N
2               1.0         Urban           Y
3               1.0         Urban           Y
4               1.0         Urban           Y
..              ...           ...         ...
609             1.0         Rural           Y
610             1.0         Rural           Y
611             1.0         Urban           Y
612             1.0         Urban           Y
613             0.0     Semiurban           N

[614 rows x 13 columns]
```

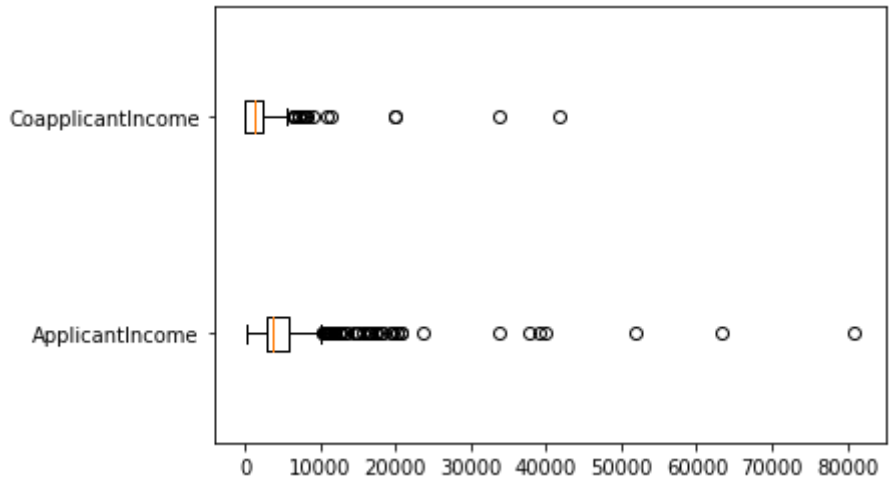
In [11]:

```
values=df['ApplicantIncome']
plt.boxplot(values, vert=False)    #simple way to create a boxplot
plt.show()
```



In [12]:

```
v1=df['ApplicantIncome']
v2=df['CoapplicantIncome']

values=[v1,v2]
plt.boxplot(values, vert=False,labels=['ApplicantIncome','CoapplicantIncome'])
plt.show()
```



In [ ]: