Graphical Methods

Histograms

- Histograms can be produced using hist.
- A basic histogram produced using the code below is presented below.
- This example sets the number of bins used in producing the histogram using the keyword argument bins.

Adding a Title and Legend

Titles are added with title and legends are added with legend. legend requires that lines have labels, which is why 3 calls are made to plot – each series has its own label.

```
x = cumsum(randn(100,3), axis = 0)

plot(x[:,0],'b',label = 'Series 1')
hold(True)
plot(x[:,1],'g.',label = 'Series 2')
plot(x[:,2],'r:',label = 'Series 3')

legend()
title('Basic Legend')
```

- legend takes keyword arguments which can be used to change its location (loc and an integer, see the docstring), remove the frame (frameon) and add a title to the legend box (title).
- The output of a simple example using these options is presented in panel (b).

```
plot(x[:,0],'b',
label = 'Series 1')
hold(True)
plot(x[:,1],'g.',label = 'Series 2')
plot(x[:,2],'r:',label = 'Series 3')
legend(loc = 0, frameon = False, title = 'The Legend')
title('Improved Legend')
```

Data Analysis with Python

0.1 Plotting

```
close_px.plot(label='AAPL')
mavg.plot(label='mavg')
plt.legend()
```