

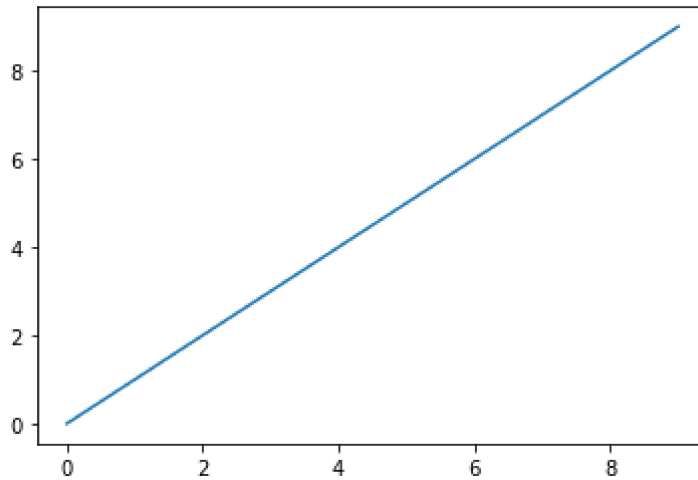
```
In [9]: import matplotlib.pyplot as plt
import numpy as np
```

```
In [10]: data = np.arange(10)
data
```

```
Out[10]: array([0, 1, 2, 3, 4, 5, 6, 7, 8, 9])
```

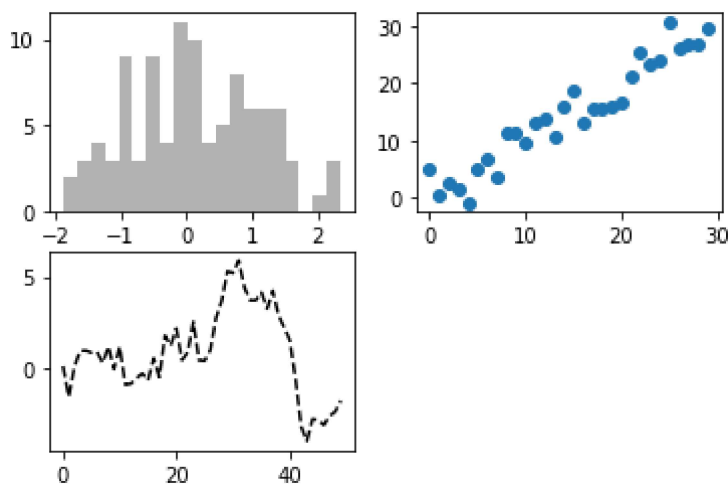
```
In [11]: plt.plot(data)
```

```
Out[11]: [<matplotlib.lines.Line2D at 0x2adbef58eb0>]
```

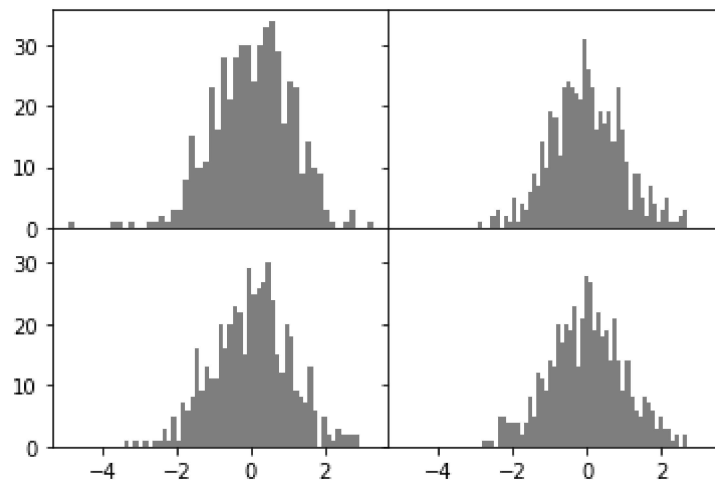


```
In [14]: fig = plt.figure()
ax1 = fig.add_subplot(2,2,1)
ax1.hist(np.random.randn(100), bins=20, color='k', alpha=0.3)
ax2 = fig.add_subplot(2,2,2)
ax2.scatter(np.arange(30), np.arange(30) + 3 * np.random.randn(30))
ax3 = fig.add_subplot(2,2,3)
plt.plot(np.random.randn(50).cumsum(), 'k--')
```

```
Out[14]: [<matplotlib.lines.Line2D at 0x2adbf468070>]
```

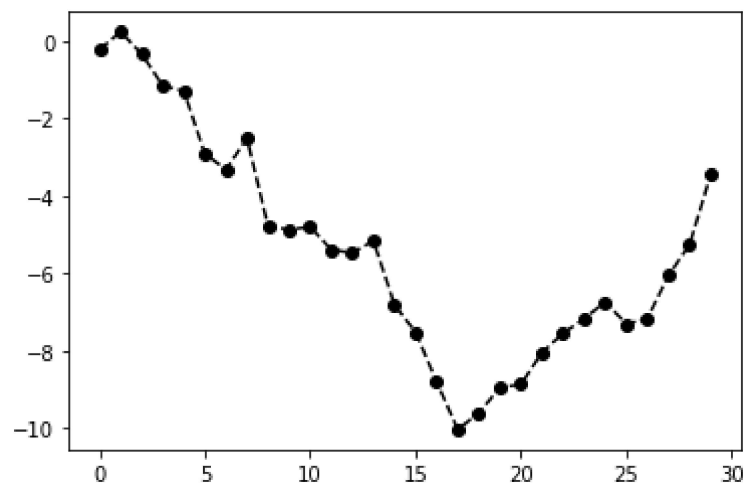


```
In [13]: fig, axes = plt.subplots(2, 2, sharex=True, sharey=True)
         for i in range(2):
             for j in range(2):
                 axes[i, j].hist(np.random.randn(500), bins=50, color='k', alpha=0.5)
         plt.subplots_adjust(wspace=0, hspace=0)
```



```
In [16]: from numpy.random import randn
         plt.plot(randn(30).cumsum(), 'ko--')
```

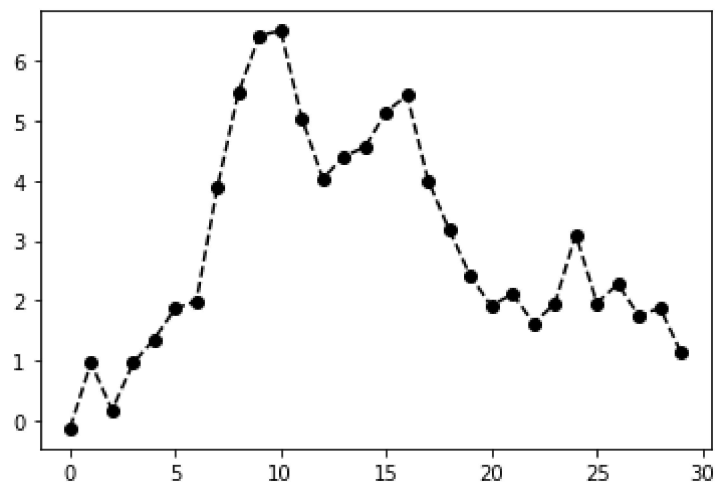
Out[16]: [<matplotlib.lines.Line2D at 0x2adb51dd60>]



In [60]:

```
plt.plot(randn(30).cumsum(), color='k', linestyle='dashed', marker='o')
```

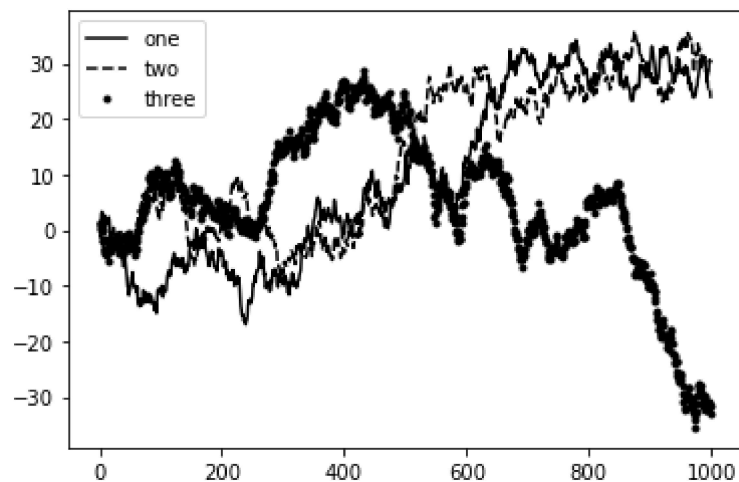
Out[60]: [<matplotlib.lines.Line2D at 0x2e5a908e1c0>]



In [61]:

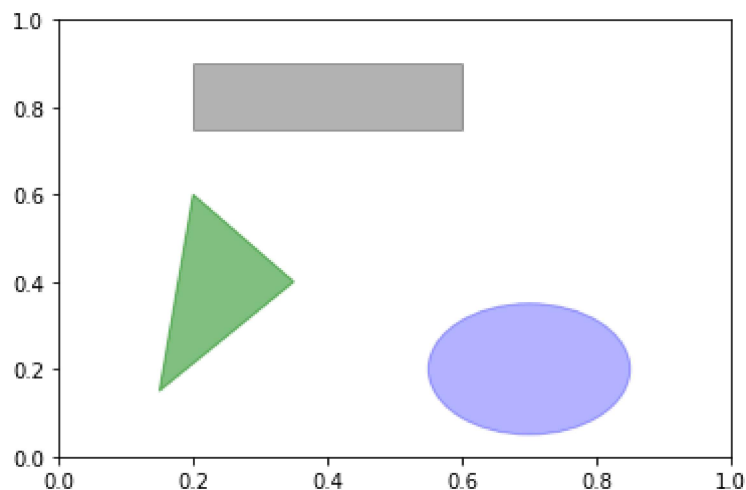
```
fig = plt.figure(); ax = fig.add_subplot(1, 1, 1)
ax.plot(randn(1000).cumsum(), 'k', label='one')
ax.plot(randn(1000).cumsum(), 'k--', label='two')
ax.plot(randn(1000).cumsum(), 'k.', label='three')
ax.legend(loc='best')
```

Out[61]: <matplotlib.legend.Legend at 0x2e5a94f4ac0>



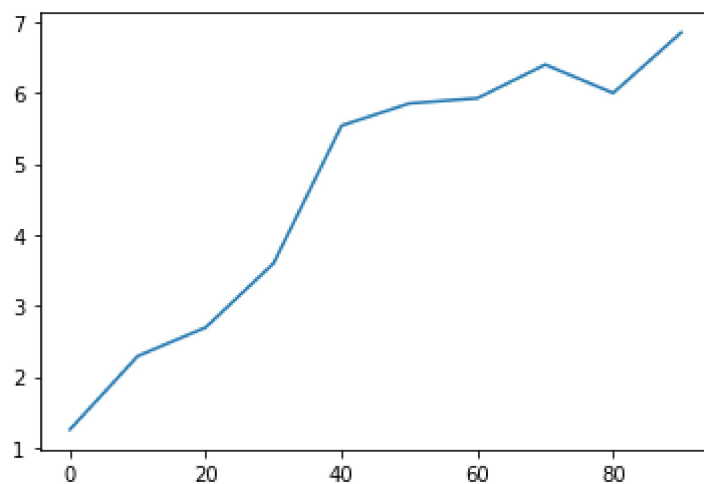
```
In [62]: fig = plt.figure()
ax = fig.add_subplot(1, 1, 1)
rect = plt.Rectangle((0.2, 0.75), 0.4, 0.15, color='k', alpha=0.3)
circ = plt.Circle((0.7, 0.2), 0.15, color='b', alpha=0.3)
pgon = plt.Polygon([[0.15, 0.15], [0.35, 0.4], [0.2, 0.6]],
                    color='g', alpha=0.5)
ax.add_patch(rect)
ax.add_patch(circ)
ax.add_patch(pgon)
```

Out[62]: <matplotlib.patches.Polygon at 0x2e5a962eb20>



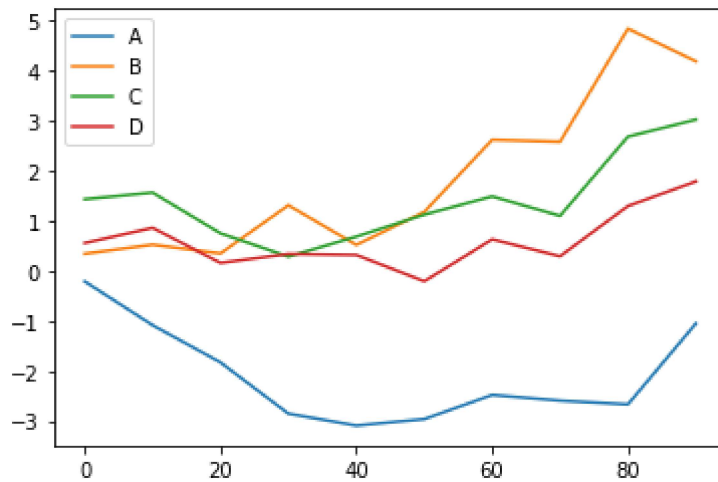
```
In [17]: s = pd.Series(np.random.randn(10).cumsum(),
                        index=np.arange(0, 100, 10))
s.plot()
```

Out[17]: <matplotlib.axes._subplots.AxesSubplot at 0x2adc055b8e0>



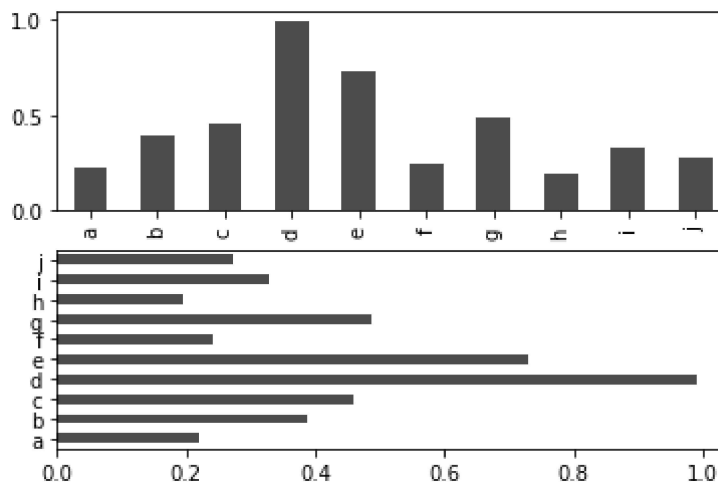
```
In [19]: df = pd.DataFrame(np.random.randn(10, 4).cumsum(0),
                           columns=['A', 'B', 'C', 'D'],
                           index=np.arange(0, 100, 10))
df.plot()
```

Out[19]: <matplotlib.axes._subplots.AxesSubplot at 0x2adc05c3c10>



```
In [36]: fig, axes = plt.subplots(2, 1)
data = pd.Series(np.random.rand(10), index=list('abcdefghij'))
data.plot.bar(ax=axes[0], color='k', alpha=0.7)
data.plot.barh(ax=axes[1], color='k', alpha=0.7)
```

Out[36]: <matplotlib.axes._subplots.AxesSubplot at 0x2adc0cee9a0>



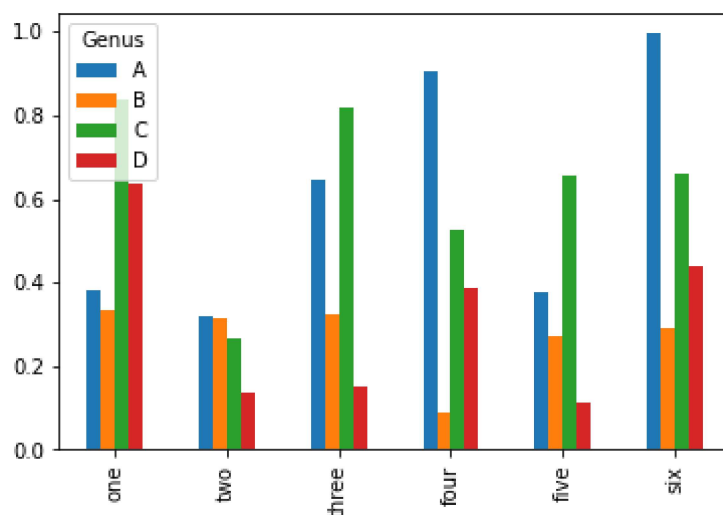
```
In [37]: df = pd.DataFrame(np.random.rand(6, 4),
index=['one', 'two', 'three', 'four', 'five', 'six'],
columns=pd.Index(['A', 'B', 'C', 'D'], name='Genus'))
df
```

```
Out[37]:
```

Genus	A	B	C	D
one	0.395797	0.307554	0.247120	0.035309
two	0.882743	0.831549	0.814049	0.416813
three	0.630482	0.510624	0.191002	0.199976
four	0.725470	0.991689	0.458977	0.419214
five	0.672715	0.335410	0.403354	0.559064
six	0.524165	0.621613	0.698740	0.206952

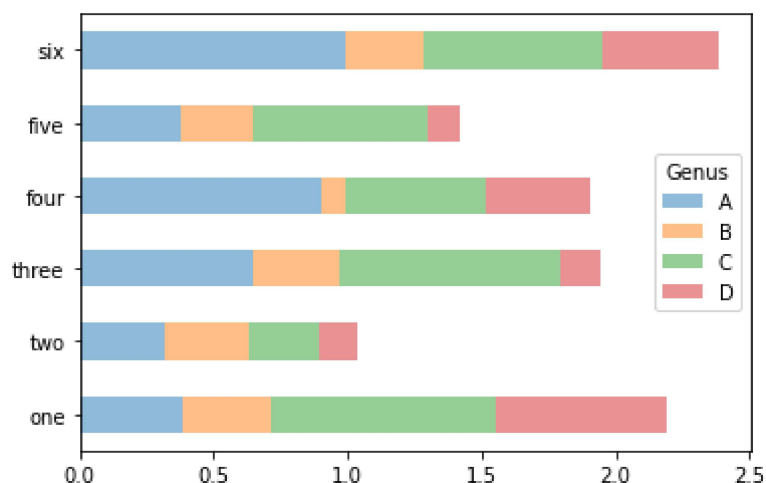
```
In [7]: df.plot.bar()
```

```
Out[7]: <matplotlib.axes._subplots.AxesSubplot at 0x262dd54d3a0>
```



```
In [8]: df.plot.barh(stacked=True, alpha=0.5)
```

```
Out[8]: <matplotlib.axes._subplots.AxesSubplot at 0x262dd612f40>
```



In []:

In []: