Pandas Data Visualization

In [1]:
```
import pandas as pd
import matplotlib.pyplot as plt
df3 = pd.read_csv('df3')
%matplotlib inline
```

In [2]:
```
df3.info()
```

```
<class 'pandas.core.frame.DataFrame'>
RangeIndex: 500 entries, 0 to 499
Data columns (total 4 columns):
a    500 non-null float64
b    500 non-null float64
c    500 non-null float64
d    500 non-null float64
dtypes: float64(4)
memory usage: 15.7 KB
```

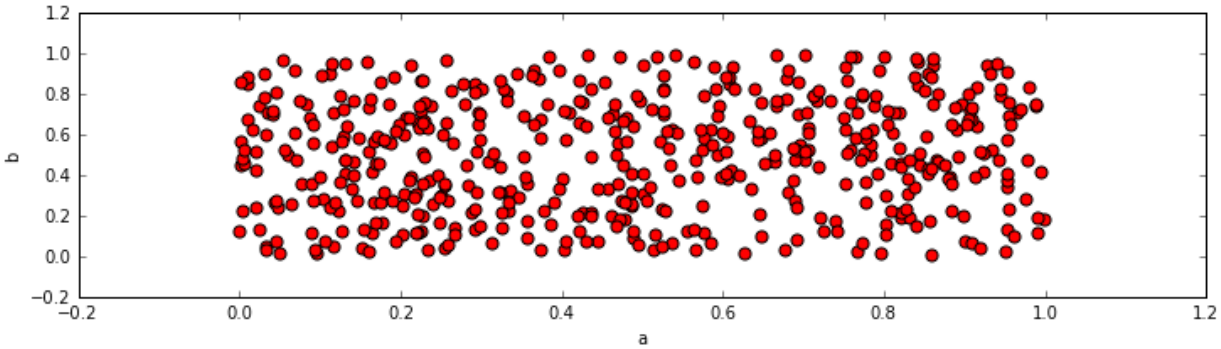
In [3]:
```
df3.head()
```

Out[3]:

	a	b	c	d
0	0.336272	0.325011	0.001020	0.401402
1	0.980265	0.831835	0.772288	0.076485
2	0.480387	0.686839	0.000575	0.746758
3	0.502106	0.305142	0.768608	0.654685
4	0.856602	0.171448	0.157971	0.321231

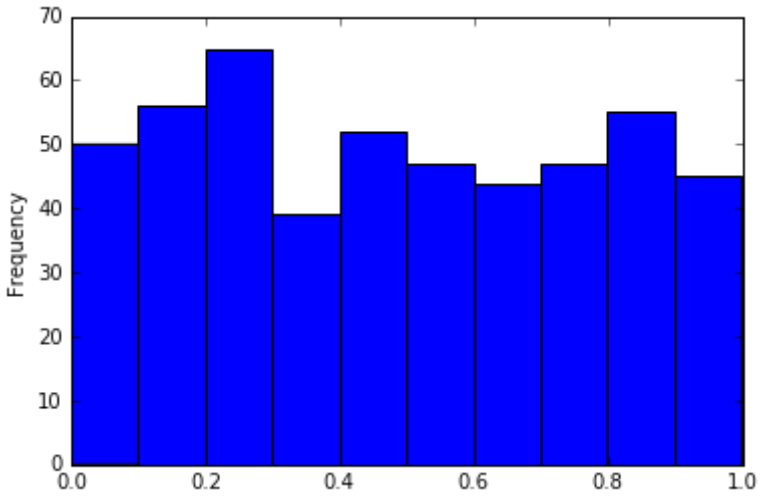
In [4]:
```
df3.plot.scatter(x='a',y='b',c='red',s=50,figsize=(12,3))
```

Out[4]:
```
<matplotlib.axes._subplots.AxesSubplot at 0x1176a7da0>
```



In [5]:
```
df3['a'].plot.hist()
```

Out[5]:
```
<matplotlib.axes._subplots.AxesSubplot at 0x1177a2860>
```

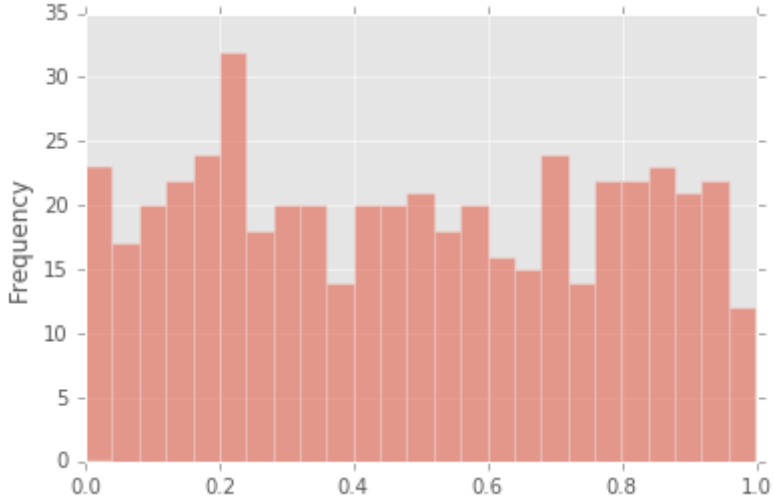


** To give a polished look to plots changed the style and used 'ggplot'***

In [6]:
```
plt.style.use('ggplot')
```

In [7]:
```
df3['a'].plot.hist(alpha=0.5,bins=25)
```

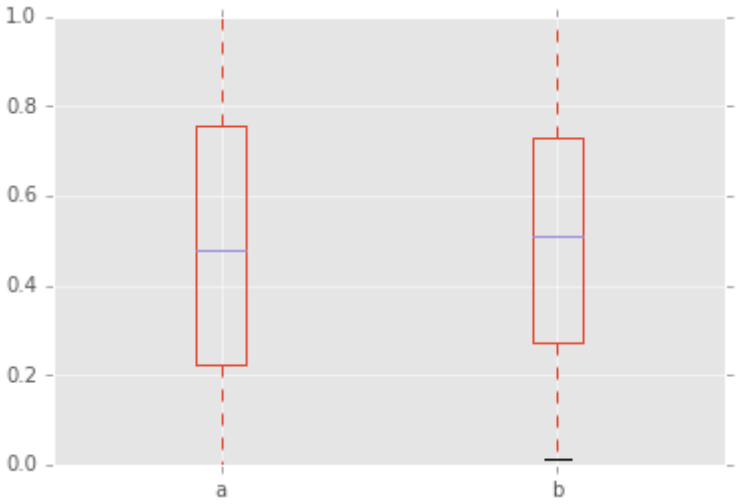
Out[7]:
```
<matplotlib.axes._subplots.AxesSubplot at 0x11a87b908>
```



** Boxplot comparing the a and b columns.**

In [8]:
```
df3[['a','b']].plot.box()
```

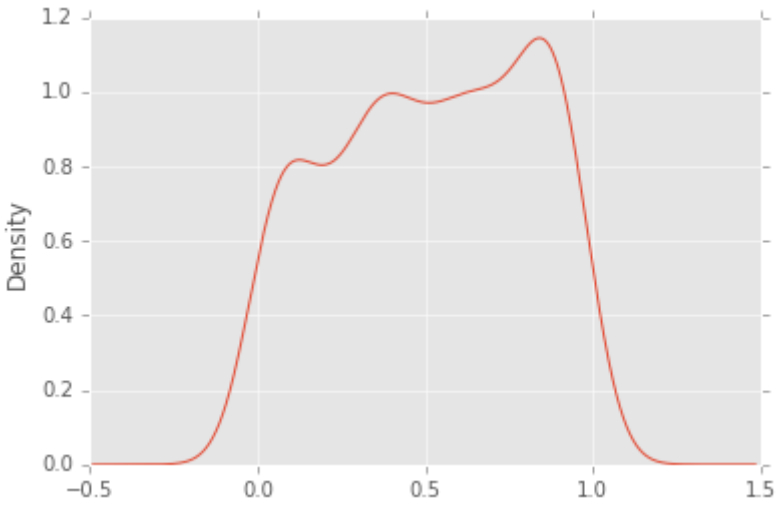
Out[8]:
```
<matplotlib.axes._subplots.AxesSubplot at 0x1177c4a20>
```



** kernal Density Estimate plot of the 'd' column **

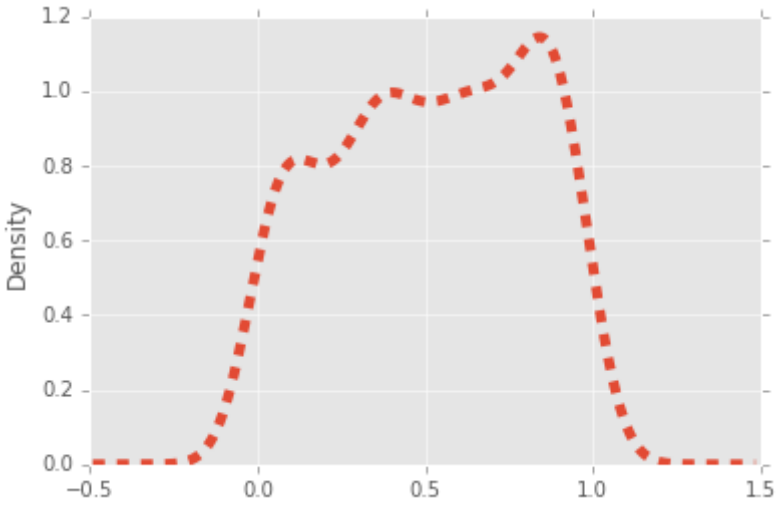
In [9]:
```
df3['d'].plot.kde()
```

Out[9]:
```
<matplotlib.axes._subplots.AxesSubplot at 0x11abb6278>
```



In [10]:
```
df3['d'].plot.density(lw=5,ls='--')
```

Out[10]:
```
<matplotlib.axes._subplots.AxesSubplot at 0x11ab9acc0>
```



** Area plot of all the columns**

In [17]:
```
f = plt.figure()
df3.ix[0:30].plot.area(alpha=0.4,ax=f.gca())
plt.legend(loc='center left', bbox_to_anchor=(1.0, 0.5))
plt.show()
```