Pandas data visualization

August 22, 2021

[28]:
```
import pandas as pd
import matplotlib.pyplot as plt

%matplotlib inline
```

[29]:
```
df1 = pd.read_csv('df1')
df1
```

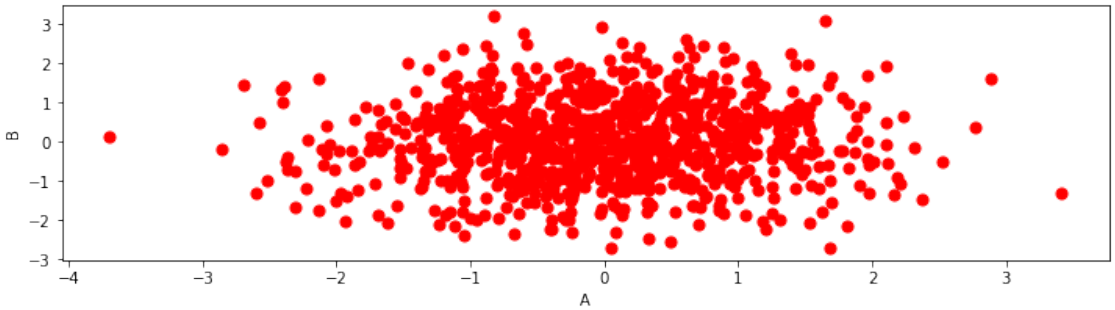
[29]:

	Unnamed: 0	A	B	C	D
0	2000-01-01	1.339091	-0.163643	-0.646443	1.041233
1	2000-01-02	-0.774984	0.137034	-0.882716	-2.253382
2	2000-01-03	-0.921037	-0.482943	-0.417100	0.478638
3	2000-01-04	-1.738808	-0.072973	0.056517	0.015085
4	2000-01-05	-0.905980	1.778576	0.381918	0.291436
..	…	…	…	…	…
995	2002-09-22	1.013897	-0.288680	-0.342295	-0.638537
996	2002-09-23	-0.642659	-0.104725	-0.631829	-0.909483
997	2002-09-24	0.370136	0.233219	0.535897	-1.552605
998	2002-09-25	0.183339	1.285783	-1.052593	-2.565844
999	2002-09-26	0.775133	-0.850374	0.486728	-1.053427

[1000 rows x 5 columns]

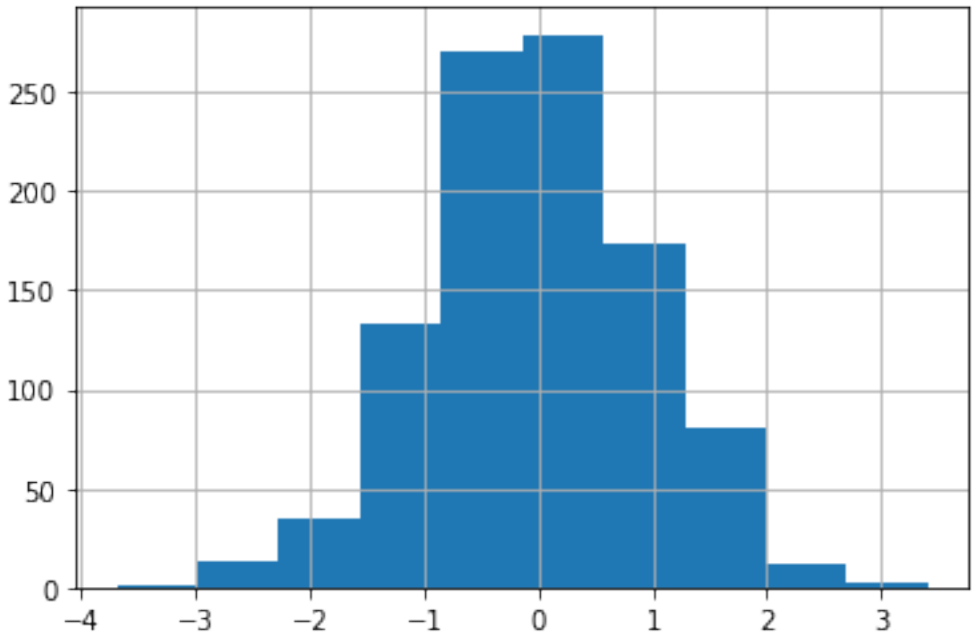
[10]:
```
df1.plot.scatter(x = 'A', y = 'B', color = 'red', figsize = (12,3), s = 50)
```

[10]: <AxesSubplot:xlabel='A', ylabel='B'>



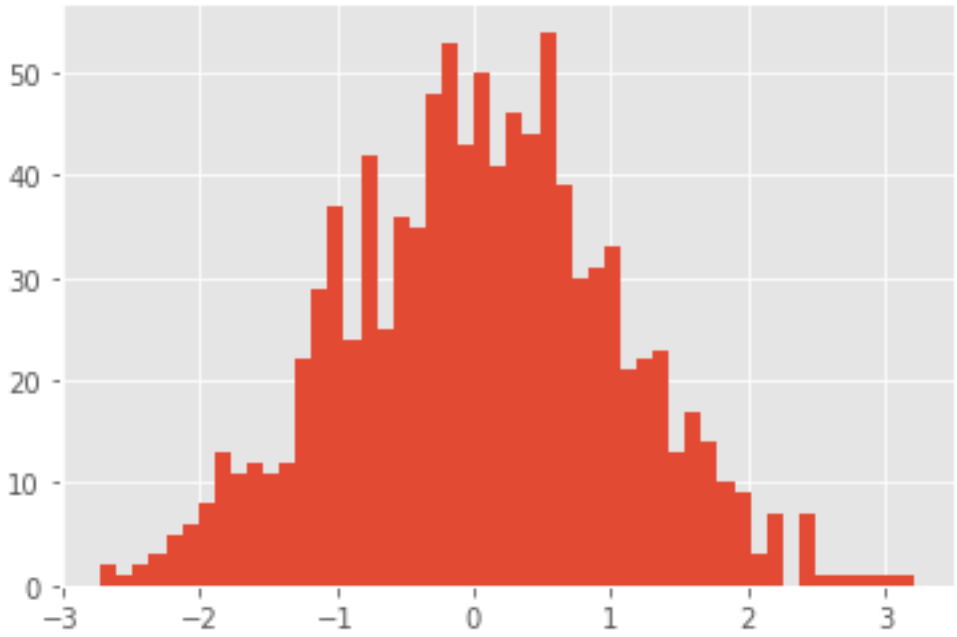
[9]:
```
df1['A'].hist()
```

[9]: <AxesSubplot:>



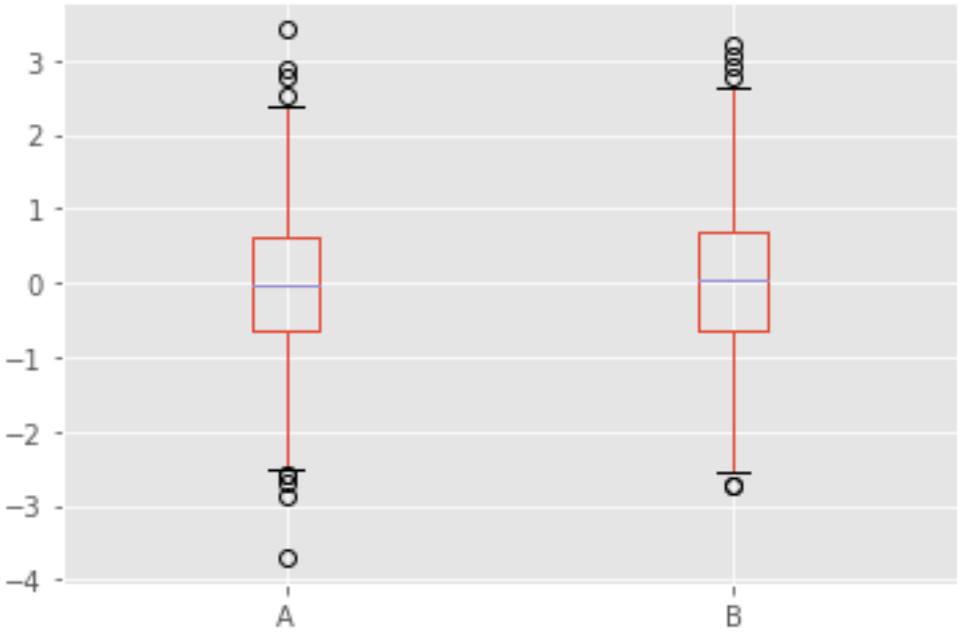
[17]:
```
plt.style.use('ggplot')
df1['B'].hist(bins = 50)
```

[17]: <AxesSubplot:>



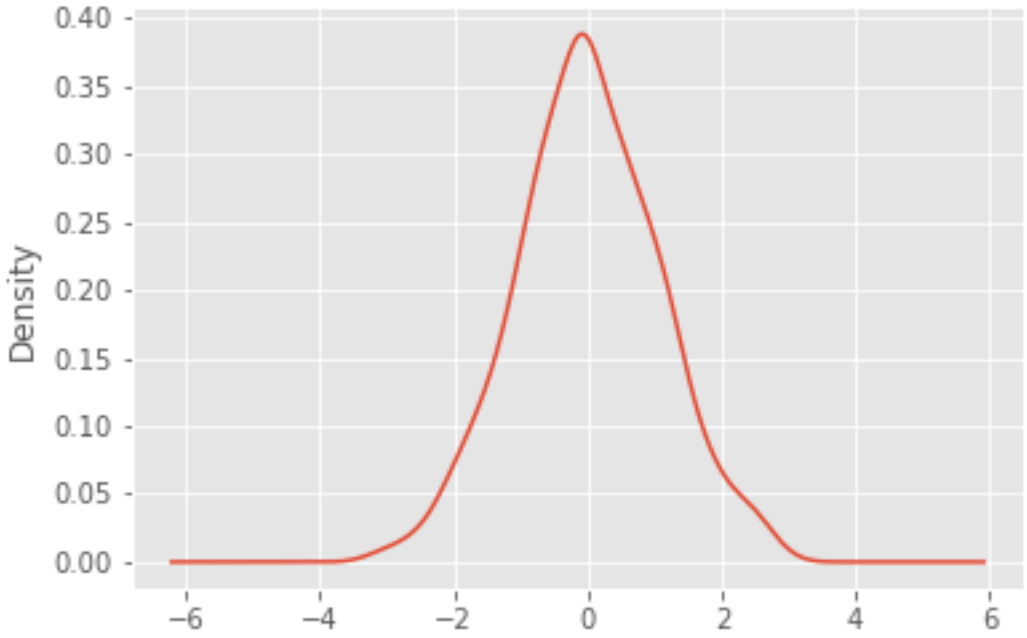
[20]:
```
df1[['A', 'B']].plot.box()
```

[20]: <AxesSubplot:>



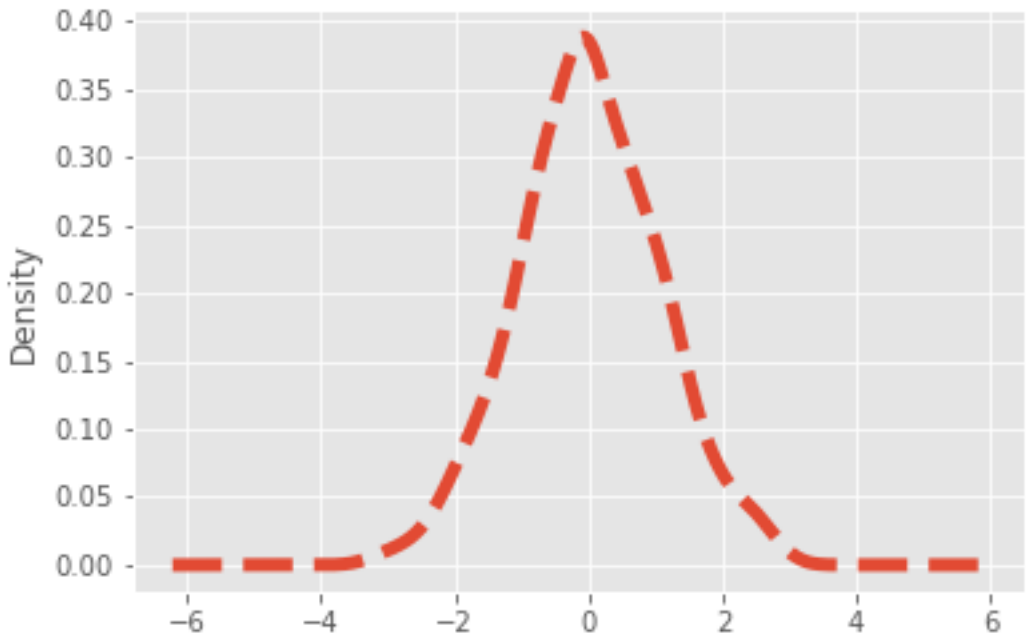
[21]:
```
df1['D'].plot.kde()
```

[21]: <AxesSubplot:ylabel='Density'>



[22]:
```
df1['D'].plot.kde(ls = "--", lw = 5)
```

[22]: <AxesSubplot:ylabel='Density'>



[33]:
```
df2 = pd.DataFrame({'a' : [0.039762, 0.937288, 0.780504, 0.6721717, 0.053829],
                    'b' : [0.218517, 0.041567, 0.008948, 0.247870, 0.520124],
                    'c' : [0.013423, 0.899125, 0.557808, 0.264071, 0.552264],
                    'd' : [0.957904, 0.977680, 0.797510, 0.444358, 0.190008]})
```

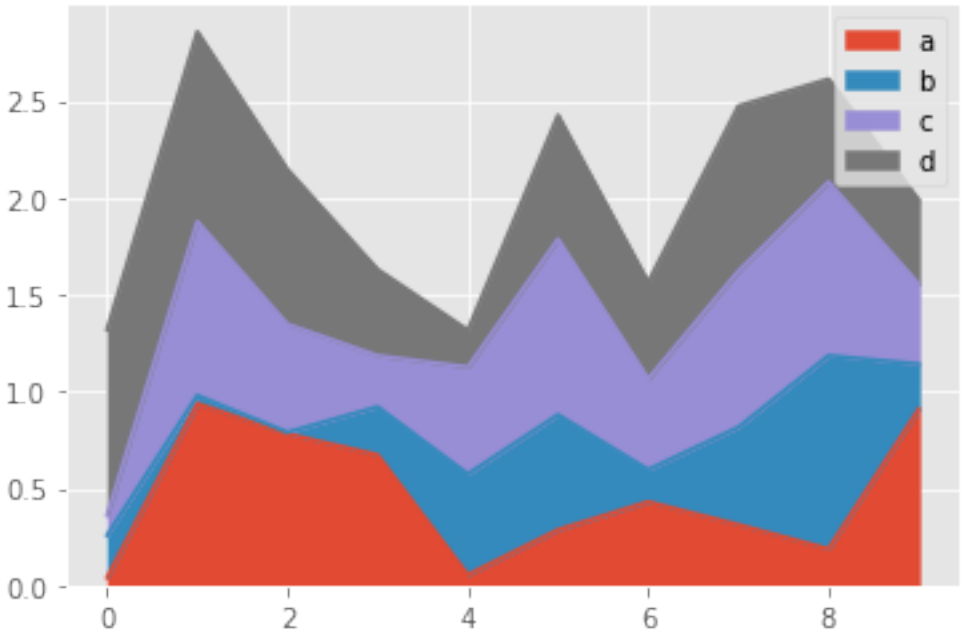
[34]:
```
df2 = pd.read_csv('df2')
df2
```

[34]:

	a	b	c	d
0	0.039762	0.218517	0.103423	0.957904
1	0.937288	0.041567	0.899125	0.977680
2	0.780504	0.008948	0.557808	0.797510
3	0.672717	0.247870	0.264071	0.444358
4	0.053829	0.520124	0.552264	0.190008
5	0.286043	0.593465	0.907307	0.637898
6	0.430436	0.166230	0.469383	0.497701
7	0.312296	0.502823	0.806609	0.850519
8	0.187765	0.997075	0.895955	0.530390
9	0.908162	0.232726	0.414138	0.432007

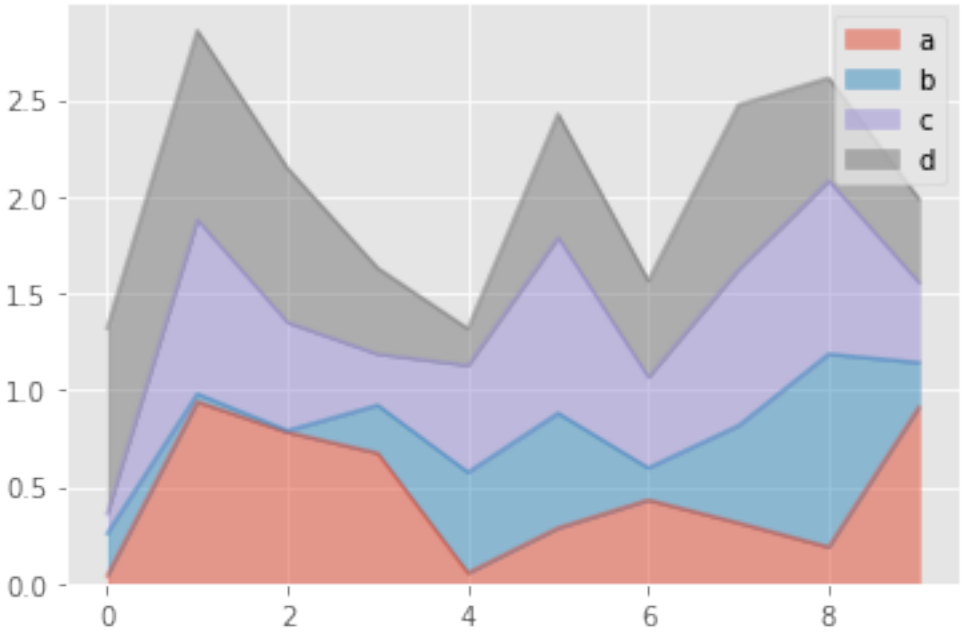
[35]:
```
df2.loc[:10].plot.area()
```

[35]:
```
<AxesSubplot:>
```



[37]:
```
df2.loc[:10].plot.area(alpha = 0.5)
```

[37]: <AxesSubplot:>



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