

```
import pandas as pd
import numpy as np
df=pd.DataFrame(np.random.randn(5,3),index=['a','c','e','f','h'],columns=['one','two','three'])
print(df)
```

	one	two	three
a	0.290276	-0.346737	-0.743993
c	-0.592178	1.680116	0.276772
e	-1.148712	0.970264	1.682208
f	-0.024980	0.135384	-1.475219
h	0.363672	-1.730232	0.670108

```
df=df.reindex(['a','b','c','d','e','f','g','h'])
print(df)
```

	one	two	three
a	0.290276	-0.346737	-0.743993
b	NaN	NaN	NaN
c	-0.592178	1.680116	0.276772
d	NaN	NaN	NaN
e	-1.148712	0.970264	1.682208
f	-0.024980	0.135384	-1.475219
g	NaN	NaN	NaN
h	0.363672	-1.730232	0.670108

```
df1=df
```

```
print(df.dropna())
```

	one	two	three
a	0.290276	-0.346737	-0.743993
c	-0.592178	1.680116	0.276772
e	-1.148712	0.970264	1.682208
f	-0.024980	0.135384	-1.475219
h	0.363672	-1.730232	0.670108

```
df2=df1
```

```
print(df1.fillna(0))
```

	one	two	three
a	0.290276	-0.346737	-0.743993
b	0.000000	0.000000	0.000000
c	-0.592178	1.680116	0.276772
d	0.000000	0.000000	0.000000
e	-1.148712	0.970264	1.682208
f	-0.024980	0.135384	-1.475219
g	0.000000	0.000000	0.000000
h	0.363672	-1.730232	0.670108

```
df3=df2
print(df2.fillna(method='pad'))
```

	one	two	three
a	0.290276	-0.346737	-0.743993
b	0.290276	-0.346737	-0.743993
c	-0.592178	1.680116	0.276772
d	-0.592178	1.680116	0.276772
e	-1.148712	0.970264	1.682208
f	-0.024980	0.135384	-1.475219
g	-0.024980	0.135384	-1.475219
h	0.363672	-1.730232	0.670108

```
df4=df3
print(df3.fillna(method='bfill'))
```

	one	two	three
a	0.290276	-0.346737	-0.743993
b	-0.592178	1.680116	0.276772
c	-0.592178	1.680116	0.276772
d	-1.148712	0.970264	1.682208
e	-1.148712	0.970264	1.682208
f	-0.024980	0.135384	-1.475219
g	0.363672	-1.730232	0.670108
h	0.363672	-1.730232	0.670108

```
print(df4['one'].notnull())
```

```
a    True
b   False
c    True
d   False
e    True
f    True
g   False
h    True
Name: one, dtype: bool
```

```
df['Age']=[170,20,54,19,32,24,50,87]
df5=df
print(df.replace({170:17,50:5}))
```

	one	two	three	Age
a	0.290276	-0.346737	-0.743993	17
b	NaN	NaN	NaN	20
c	-0.592178	1.680116	0.276772	54
d	NaN	NaN	NaN	19
e	-1.148712	0.970264	1.682208	32
f	-0.024980	0.135384	-1.475219	24
g	NaN	NaN	NaN	5
h	0.363672	-1.730232	0.670108	87

```
df6=df5  
print(df5['two'].dropna())
```

```
a    -0.346737  
c     1.680116  
e     0.970264  
f     0.135384  
h    -1.730232  
Name: two, dtype: float64
```