

```
In [1]: import numpy as np
import pandas as pd
df=pd.DataFrame(np.random.randn(5,3),index=['a','c','e','f','h'],columns=['One','Two','Three'])
print(df)
```

	One	Two	Three
a	0.186248	1.267506	-1.766596
c	1.283849	-0.560481	-1.072233
e	-1.010959	0.824786	-0.589200
f	0.946344	-0.186233	-0.564979
h	0.798266	1.407228	0.190562

```
In [17]: df1=df.reindex(['a','b','c','d','e','f','g','h'])
print(df)
```

	One	Two	Three
a	0.186248	1.267506	-1.766596
b	NaN	NaN	NaN
c	1.283849	-0.560481	-1.072233
d	NaN	NaN	NaN
e	-1.010959	0.824786	-0.589200
f	0.946344	-0.186233	-0.564979
g	NaN	NaN	NaN
h	0.798266	1.407228	0.190562

```
In [18]: print(df1.dropna())
```

	One	Two	Three
a	0.186248	1.267506	-1.766596
c	1.283849	-0.560481	-1.072233
e	-1.010959	0.824786	-0.589200
f	0.946344	-0.186233	-0.564979
h	0.798266	1.407228	0.190562

```
In [19]: print(df1.fillna(method='pad'))
```

	One	Two	Three
a	0.186248	1.267506	-1.766596
b	0.186248	1.267506	-1.766596
c	1.283849	-0.560481	-1.072233
d	1.283849	-0.560481	-1.072233
e	-1.010959	0.824786	-0.589200
f	0.946344	-0.186233	-0.564979
g	0.946344	-0.186233	-0.564979
h	0.798266	1.407228	0.190562

```
In [22]: df2=df1  
print(df2)
```

	One	Two	Three
a	0.186248	1.267506	-1.766596
b	NaN	NaN	NaN
c	1.283849	-0.560481	-1.072233
d	NaN	NaN	NaN
e	-1.010959	0.824786	-0.589200
f	0.946344	-0.186233	-0.564979
g	NaN	NaN	NaN
h	0.798266	1.407228	0.190562

```
In [24]: df3=df2  
print(df2.fillna(method='pad'))
```

	One	Two	Three
a	0.186248	1.267506	-1.766596
b	0.186248	1.267506	-1.766596
c	1.283849	-0.560481	-1.072233
d	1.283849	-0.560481	-1.072233
e	-1.010959	0.824786	-0.589200
f	0.946344	-0.186233	-0.564979
g	0.946344	-0.186233	-0.564979
h	0.798266	1.407228	0.190562

```
In [25]: print(df2.fillna(0))
```

	One	Two	Three
a	0.186248	1.267506	-1.766596
b	0.000000	0.000000	0.000000
c	1.283849	-0.560481	-1.072233
d	0.000000	0.000000	0.000000
e	-1.010959	0.824786	-0.589200
f	0.946344	-0.186233	-0.564979
g	0.000000	0.000000	0.000000
h	0.798266	1.407228	0.190562

```
In [31]: print(df3['One'].isnull())
```

a	False
b	True
c	False
d	True
e	False
f	False
g	True
h	False

Name: One, dtype: bool

```
In [32]: print(df3['One'].notnull())
```

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

```
In [35]: a=pd.DataFrame([[ 'Bala',26],[ 'Raju',31],[ 'Geeta',21],[ 'Merlin',96]],index=[1,2,3,4])
print(a)
```

	Name	Age
1	Bala	26
2	Raju	31
3	Geeta	21
4	Merlin	96

```
In [38]: print(a.replace({26:28,31:29,21:24,96:90}))
```

	Name	Age
1	Bala	28
2	Raju	29
3	Geeta	24
4	Merlin	90

```
In [40]: print(a.dropna())
```

	Name	Age
1	Bala	26
2	Raju	31
3	Geeta	21
4	Merlin	96

```
In [44]: a['Batch']=[3,4,3,10]
print(a)
```

	Name	Age	Batch
1	Bala	26	3
2	Raju	31	4
3	Geeta	21	3
4	Merlin	96	10

```
In [42]: print(a.dropna())
```

	Name	Age	Batch
1	Bala	26	3
2	Raju	31	4
3	Geeta	21	3
4	Merlin	96	10

In []: