```
In [1]: import pandas as pd
```

Drop Missing Values

```
In [2]: data=pd.read_csv('C:\\Users\\pc\\Downloads\\data_m.csv')
```

In [3]: data

Out[3]:

	Name	Marks	Grades
0	Priyang	98.0	NaN
1	Aadhya	NaN	AB
2	Krisha	99.0	AA
3	Vedant	87.0	NaN
4	Parshv	90.0	AC
5	Mittal	NaN	ВА
6	Archana	82.0	ВВ

In [4]: data.dropna(axis=0,how='any')

Out[4]:

	Name	Marks	Grades
2	Krisha	99.0	AA
4	Parshv	90.0	AC
6	Archana	82.0	ВВ

In [5]: data.dropna(axis=1,how='any')

Out[5]:

Name

- **0** Priyang
- 1 Aadhya
- 2 Krisha
- 3 Vedant
- 4 Parshv
- 5 Mittal
- 6 Archana

In [6]: data.dropna(axis=0,how='all')

Out[6]:

	Name	Marks	Grades
0	Priyang	98.0	NaN
1	Aadhya	NaN	AB
2	Krisha	99.0	AA
3	Vedant	87.0	NaN
4	Parshv	90.0	AC
5	Mittal	NaN	ВА
6	Archana	82.0	ВВ

In [7]: data.dropna(axis=1,how='all')

Out[7]:

	Name	Marks	Grades
0	Priyang	98.0	NaN
1	Aadhya	NaN	AB
2	Krisha	99.0	AA
3	Vedant	87.0	NaN
4	Parshv	90.0	AC
5	Mittal	NaN	ВА
6	Archana	82.0	ВВ

In [8]: | data.dropna(axis=0,thresh=2)

Out[8]:

	Name	Marks	Grades
0	Priyang	98.0	NaN
1	Aadhya	NaN	AB
2	Krisha	99.0	AA
3	Vedant	87.0	NaN
4	Parshv	90.0	AC
5	Mittal	NaN	ВА
6	Archana	82.0	BB

```
In [9]: data.dropna(subset=["Marks"])
```

Out[9]:

	Name	Marks	Grades
0	Priyang	98.0	NaN
2	Krisha	99.0	AA
3	Vedant	87.0	NaN
4	Parshv	90.0	AC
6	Archana	82.0	ВВ

FIIINa

```
In [10]: data.fillna(0)
```

Out[10]:

	Name	Marks	Grades
0	Priyang	98.0	0
1	Aadhya	0.0	AB
2	Krisha	99.0	AA
3	Vedant	87.0	0
4	Parshv	90.0	AC
5	Mittal	0.0	ВА
6	Archana	82.0	ВВ

```
In [11]: df=pd.read_csv('C:\\Users\\pc\\Downloads\\data_m.csv')
```

```
In [12]: df.fillna({'Marks':97,'Grades':'A'})
```

Out[12]:

	Name	Marks	Grades
0	Priyang	98.0	Α
1	Aadhya	97.0	AB
2	Krisha	99.0	AA
3	Vedant	87.0	Α
4	Parshv	90.0	AC
5	Mittal	97.0	ВА
6	Archana	82.0	ВВ

```
In [13]: df1={"city":['Fsd','Isb','Lhr','Slk','Grw'],'Temp':[99,111,90,None,None]}
```

```
df1
In [14]:
Out[14]: {'city': ['Fsd', 'Isb', 'Lhr', 'Slk', 'Grw'],
            'Temp': [99, 111, 90, None, None]}
In [15]: | df=pd.DataFrame(df1)
In [16]:
          data
Out[16]:
                Name Marks Grades
               Priyang
           0
                        98.0
                                NaN
               Aadhya
           1
                        NaN
                                 AB
           2
                Krisha
                        99.0
                                 AA
           3
               Vedant
                        87.0
                                NaN
           4
               Parshv
                        90.0
                                 AC
           5
                                 ВА
                Mittal
                        NaN
                        82.0
                                 ВВ
           6 Archana
In [17]:
          data.fillna(method='pad')
Out[17]:
                Name Marks Grades
           0
               Priyang
                        98.0
                                NaN
           1
               Aadhya
                        98.0
                                 AB
           2
                Krisha
                        99.0
                                 AA
           3
               Vedant
                        87.0
                                 AΑ
               Parshv
                        90.0
                                 AC
           5
                Mittal
                        90.0
                                 ВА
                        82.0
                                 ВВ
           6 Archana
          data.fillna(method='ffill')
In [18]:
Out[18]:
                Name Marks Grades
           0
               Priyang
                        98.0
                                NaN
               Aadhya
                        98.0
                                 AΒ
           1
           2
                Krisha
                        99.0
                                 AA
           3
               Vedant
                        87.0
                                 AΑ
               Parshv
                        90.0
                                 AC
           5
                 Mittal
                        90.0
                                 ВА
```

6 Archana

82.0

BB

In [19]: data.fillna(method='backfill')

Out[19]:

	Name	Marks	Grades
0	Priyang	98.0	AB
1	Aadhya	99.0	AB
2	Krisha	99.0	AA
3	Vedant	87.0	AC
4	Parshv	90.0	AC
5	Mittal	82.0	ВА
6	Archana	82.0	ВВ

In [20]:

data.fillna(method='bfill')

Out[20]:

	Name	Marks	Grades
0	Priyang	98.0	AB
1	Aadhya	99.0	AB
2	Krisha	99.0	AA
3	Vedant	87.0	AC
4	Parshv	90.0	AC
5	Mittal	82.0	ВА
6	Archana	82.0	ВВ

In [21]: | data.fillna(method="ffill",axis=1)

Out[21]:

	Name	Marks	Grades
0	Priyang	98.0	98.0
1	Aadhya	Aadhya	AB
2	Krisha	99.0	AA
3	Vedant	87.0	87.0
4	Parshv	90.0	AC
5	Mittal	Mittal	ВА
6	Archana	82.0	ВВ

```
In [22]: # limit parameter VALUE SHOULD BE GREATER THAN
# FILL the first NAN value
data.fillna(method='ffill',limit=3)
```

Out[22]:

	Name	Marks	Grades
0	Priyang	98.0	NaN
1	Aadhya	98.0	AB
2	Krisha	99.0	AA
3	Vedant	87.0	AA
4	Parshv	90.0	AC
5	Mittal	90.0	ВА
6	Archana	82.0	ВВ

```
In [24]: # Downcast always pass infer
df2=pd.DataFrame({"a":[1,None]})
df2
```

Out[24]:

```
a
0 1.0
```

1 NaN

```
In [25]: df2.fillna(0,downcast='infer')
```

Out[25]:

a

1 0

In []: