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

In [6]:
```
d={'A':[1,2,np.nan] ,'B':[5, np.nan,np.nan] ,'C':[4,7,8]}
```

In [9]:
```
df = pd.DataFrame(d)
df
```

Out[9]:

	A	B	C
0	1.0	5.0	4
1	2.0	NaN	7
2	NaN	NaN	8

In [12]:
```
df.dropna(axis=1)
```

Out[12]:

	C
0	4
1	7
2	8

In [14]:
```
df.dropna(thresh=2)
```

Out[14]:

	A	B	C
0	1.0	5.0	4
1	2.0	NaN	7

In [15]:
```
df.fillna(value ='FILL VALUE')
```

Out[15]:

	A	B	C
0	1.0	5.0	4
1	2.0	FILL VALUE	7
2	FILL VALUE	FILL VALUE	8

In [18]:
```
df['A'].fillna(value=df['A'].mean())
```

Out[18]:
```
0    1.0
1    2.0
2    1.5
Name: A, dtype: float64
```

GROUPBY

In [35]:
```
data ={'company': ['micro','micro','larson','yandt','TCS','TCS'],
       'person':['sam','Abhi','ajay','ashutosh','Liam','mark'],
       'sales':[200,500,5000,600,900,180]}
```

In [36]:
```
df= pd.DataFrame(data)
df
```

Out[36]:

	company	person	sales
0	micro	sam	200
1	micro	Abhi	500
2	larson	ajay	5000
3	yandt	ashutosh	600
4	TCS	Liam	900
5	TCS	mark	180

In [38]:
```
comp = df.groupby('company')
```

In [39]:
```
comp.mean()
```

Out[39]:

company	sales
TCS	540.0
larson	5000.0
micro	350.0
yandt	600.0

In [41]:
```
comp.max()
```

Out[41]:

company	person	sales
TCS	mark	900
larson	ajay	5000
micro	sam	500
yandt	ashutosh	600

In [42]:
```
comp.sum().loc['TCS']
```

Out[42]:
```
sales    1080
Name: TCS, dtype: int64
```

In [43]:
```
df.groupby('company').count()
```

Out[43]:

company	person	sales
TCS	2	2
larson	1	1
micro	2	2
yandt	1	1

In [45]:
```
df.groupby('company').max()
```

Out[45]:

company	person	sales
TCS	mark	900
larson	ajay	5000
micro	sam	500
yandt	ashutosh	600

In [48]:
```
df.groupby('company').describe().transpose()
```

Out[48]:

	company	TCS	larson	micro	yandt
sales	**count**	2.000000	1.0	2.000000	1.0
	mean	540.000000	5000.0	350.000000	600.0
	std	509.116882	NaN	212.132034	NaN
	min	180.000000	5000.0	200.000000	600.0
	25%	360.000000	5000.0	275.000000	600.0
	50%	540.000000	5000.0	350.000000	600.0
	75%	720.000000	5000.0	425.000000	600.0
	max	900.000000	5000.0	500.000000	600.0

In [ ]:
```
```