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

```

In [2]:
```
df=pd.read_csv(r"C:\Users\kaush\Downloads\housing.csv")
```

In [3]:
```
df
```

Out[3]:

	RM	LSTAT	PTRATIO	MEDV
0	6.575	4.98	15.3	504000.0
1	6.421	9.14	17.8	453600.0
2	7.185	4.03	17.8	728700.0
3	6.998	2.94	18.7	701400.0
4	7.147	5.33	18.7	760200.0
...	...	...	...	...
484	6.593	9.67	21.0	470400.0
485	6.120	9.08	21.0	432600.0
486	6.976	5.64	21.0	501900.0
487	6.794	6.48	21.0	462000.0
488	6.030	7.88	21.0	249900.0

489 rows × 4 columns

In [4]:
```
#To find mean of all columns
df.mean()
```

Out[4]:
```
RM              6.240288
LSTAT          12.939632
PTRATIO        18.516564
MEDV       454342.944785
dtype: float64
```

In [5]:
```
#To find mean of specific column
df.loc[:,'RM'].mean()
```

Out[5]:
```
6.240288343558283
```

In [7]:
```
#To find mean row wise
df.mean(axis=1)[0:4]
```

Out[7]:
```
0    126006.71375
1    113408.34025
2    182182.25375
3    175357.15950
dtype: float64
```

In [8]:
```
# to find Median of all column
df.median()
```

Out[8]:
```
RM              6.185
LSTAT          11.690
PTRATIO        19.100
MEDV       438900.000
dtype: float64
```

In [9]:
```
#to find median of specific column
df.loc[:,'RM'].median()
```

Out[9]:
```
6.185
```

In [10]:
```
# to find median row wise
df.median(axis=1)[0:4]
```

Out[10]:
```
0    10.9375
1    13.4700
2    12.4925
3    12.8490
dtype: float64
```

In [11]:
```
#find Mode of all column
df.mode()
```

Out[11]:

	RM	LSTAT	PTRATIO	MEDV
0	5.713	6.36	20.2	525000.0
1	6.127	7.79	NaN	NaN
2	6.167	8.05	NaN	NaN
3	6.229	14.10	NaN	NaN
4	6.405	18.13	NaN	NaN
5	6.417	NaN	NaN	NaN

In [12]:
```
#To find the mode of a specific column
df.loc[:,'RM'].mode()
```

Out[12]:
```
0    5.713
1    6.127
2    6.167
3    6.229
4    6.405
5    6.417
Name: RM, dtype: float64
```

In [13]:
```
#To find minimum of all columns
df.min()
```

Out[13]:
```
RM              3.561
LSTAT           1.980
PTRATIO        12.600
MEDV       105000.000
dtype: float64
```

In [15]:
```
#To find minimum of Specific column
df.loc[:,'RM'].min(skipna = False)
```

Out[15]:
```
3.561
```

In [17]:
```
#To find Maximum of all columns
df.max()

```

Out[17]:
```
RM               8.398
LSTAT           37.970
PTRATIO         22.000
MEDV       1024800.000
dtype: float64
```

In [19]:
```
#To find Maximum of Specific column
df.loc[:,'RM'].max(skipna = False)
```

Out[19]:
```
8.398
```

In [20]:
```
#To find Standard Deviation of all columns
df.std()
```

Out[20]:
```
RM              0.643650
LSTAT           7.081990
PTRATIO         2.111268
MEDV       165340.277653
dtype: float64
```

In [21]:
```
#To find Standard Deviation of specific column
df.loc[:,'RM'].std()
```

Out[21]:
```
0.6436497627572431
```

In [23]:
```
#To find Standard Deviation row wise
df.std(axis=1)[0:4]

```

Out[23]:
```
0    251995.524207
1    226794.439885
2    364345.164214
3    350695.227064
dtype: float64
```

In [25]:
```
#groupby
df.groupby(['LSTAT'])['RM'].mean()
```

Out[25]:
```
LSTAT
1.98     7.024
2.47     8.337
2.87     7.178
2.94     6.998
2.98     6.854
         ...
34.37    4.628
34.41    5.019
34.77    4.906
36.98    4.519
37.97    4.138
Name: RM, Length: 442, dtype: float64
```

In [ ]:
```

```