Aim :

To perform Linear Regression and Logistic Regression on the given dataset using 1. By creating functions. 2. By using NumPy and sklearn library. And validating the results

Observation and Result-

1. Importing data and libraries.

In [5]:
```
import pandas as pd
import numpy as np
from sklearn import linear_model
path = r"E:\DYPIU\SEM 6\KDD\KDD LABS\LAB_05\kc_house_data.csv"
df = pd.read_csv(path)
df
```

Out[5]:

	price	bedrooms	sqft_living	floors
0	221900.0	3	1180	1.0
1	538000.0	3	2570	2.0
2	180000.0	2	770	1.0
3	604000.0	4	1960	1.0
4	510000.0	3	1680	1.0
...	...	...	...	...
21608	360000.0	3	1530	3.0
21609	400000.0	4	2310	2.0
21610	402101.0	2	1020	2.0
21611	400000.0	3	1600	2.0
21612	325000.0	2	1020	2.0

21613 rows × 4 columns

2. Linier Regression

Linier Regression

In [10]:
```
lin_reg = linear_model.LinearRegression()
#training model
lin_reg.fit(df.drop('price',axis='columns'),df.price)

#prediction

#Find price of home having 3 bedroom , 1000 sqft and 3rd floor
lin_reg.predict([[3,1000,3]])
```

Out[10]: array([227716.62570043])

3. Logistic Regression

Logistic Regression

In [*]:
```
lin_reg = linear_model.LogisticRegression()
#training model
lin_reg.fit(df.drop('price',axis='columns'),df.price)

#prediction

#Find price of home having 3 bedroom , 1000 sqft and 3rd floor
lin_reg.predict([[3,1000,3]])
```

Conclusion –

Implemented Linier and logistic regression in python using various libraries.