In [2]:
```
import numpy as np
import pandas as pd
import matplotlib.pyplot as plt
```

In [3]:
```
df=pd.read_csv("Salary_dataset.csv")
df.head(5)
```

Out[3]:

	Unnamed: 0	YearsExperience	Salary
0	0	1.2	39344.0
1	1	1.4	46206.0
2	2	1.6	37732.0
3	3	2.1	43526.0
4	4	2.3	39892.0

In [7]:
```
df.nunique
```

Out[7]:
```
<bound method DataFrame.nunique of     Unnamed: 0  YearsExperience    Salary
0            0              1.2   39344.0
1            1              1.4   46206.0
2            2              1.6   37732.0
3            3              2.1   43526.0
4            4              2.3   39892.0
5            5              3.0   56643.0
6            6              3.1   60151.0
7            7              3.3   54446.0
8            8              3.3   64446.0
9            9              3.8   57190.0
10          10              4.0   63219.0
11          11              4.1   55795.0
12          12              4.1   56958.0
13          13              4.2   57082.0
14          14              4.6   61112.0
15          15              5.0   67939.0
16          16              5.2   66030.0
17          17              5.4   83089.0
18          18              6.0   81364.0
19          19              6.1   93941.0
20          20              6.9   91739.0
21          21              7.2   98274.0
22          22              8.0  101303.0
23          23              8.3  113813.0
24          24              8.8  109432.0
25          25              9.1  105583.0
26          26              9.6  116970.0
27          27              9.7  112636.0
28          28             10.4  122392.0
29          29             10.6  121873.0>
```

In [8]:
```
df.isnull()
```

Out[8]:

	Unnamed: 0	YearsExperience	Salary
0	False	False	False
1	False	False	False
2	False	False	False
3	False	False	False
4	False	False	False
5	False	False	False
6	False	False	False
7	False	False	False
8	False	False	False
9	False	False	False
10	False	False	False
11	False	False	False
12	False	False	False
13	False	False	False
14	False	False	False
15	False	False	False
16	False	False	False
17	False	False	False
18	False	False	False
19	False	False	False
20	False	False	False
21	False	False	False
22	False	False	False
23	False	False	False
24	False	False	False
25	False	False	False
26	False	False	False
27	False	False	False
28	False	False	False
29	False	False	False

In [10]:
```
print(df.shape)
```

```
(30, 3)
```

In [11]:
```
from sklearn.model_selection import train_test_split
x=df['Salary']
y=df['YearsExperience']
x_train,x_test,y_train,y_test=train_test_split(x,y,test_size=0.4,random_state=40)
```

In [15]:
```
print(x_test)
```

```
2      37732.0
16     66030.0
19     93941.0
14     61112.0
15     67939.0
13     57082.0
20     91739.0
3      43526.0
29    121873.0
21     98274.0
11     55795.0
4      39892.0
Name: Salary, dtype: float64
```

In [16]:
```
df.info()
```

```
<class 'pandas.core.frame.DataFrame'>
RangeIndex: 30 entries, 0 to 29
Data columns (total 3 columns):
 #   Column           Non-Null Count  Dtype  
---  ------           --------------  -----  
 0   Unnamed: 0       30 non-null     int64  
 1   YearsExperience  30 non-null     float64
 2   Salary           30 non-null     float64
dtypes: float64(2), int64(1)
memory usage: 852.0 bytes
```

In [18]:
```
print(df.describe())
```

```
       Unnamed: 0  YearsExperience         Salary
count   30.000000        30.000000      30.000000
mean    14.500000         5.413333   76004.000000
std      8.803408         2.837888   27414.429785
min      0.000000         1.200000   37732.000000
25%      7.250000         3.300000   56721.750000
50%     14.500000         4.800000   65238.000000
75%     21.750000         7.800000  100545.750000
max     29.000000        10.600000  122392.000000
```