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

```
[7]: sal = pd.read_csv(r"C:\Users\kamaleshv\OneDrive\Desktop\Salary_Data.csv")
     sal
```
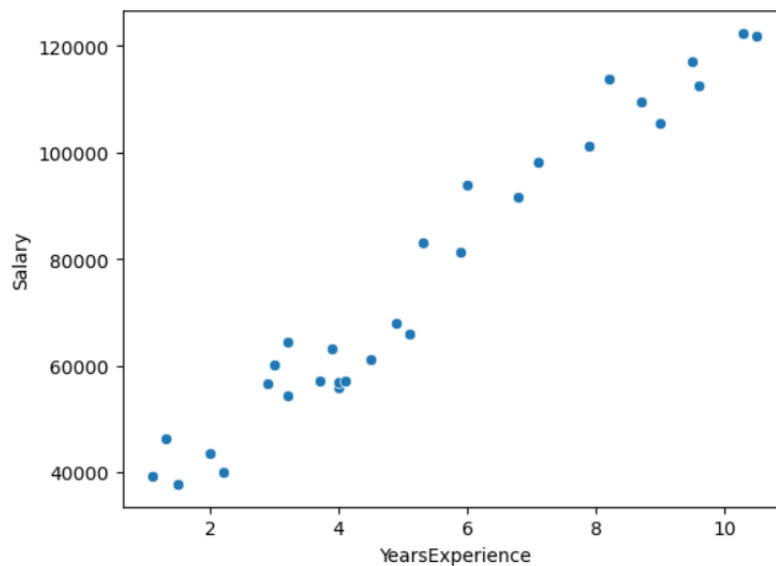
[7]:

	YearsExperience	Salary
0	1.1	39343.0
1	1.3	46205.0
2	1.5	37731.0
3	2.0	43525.0
4	2.2	39891.0
5	2.9	56642.0
6	3.0	60150.0

```
[5]: import seaborn as sns
     from matplotlib import pyplot as plt
```

```
[8]: sns.scatterplot(x=sal['YearsExperience'],y=sal['Salary'])
```

[8]: <Axes: xlabel='YearsExperience', ylabel='Salary'>

```
[9]: x = sal[['YearsExperience']]
     x
```

[9]:

	YearsExperience
0	1.1
1	1.3
2	1.5
3	2.0
4	2.2
5	2.9

```
[ ]: y = sal['Salary']
     y
```

```
[ ]: 0     39343.0
     1     46205.0
     2     37731.0
     3     43525.0
     4     39891.0
     5     56642.0
     6     60150.0
     7     54445.0
     8     64445.0
     9     57189.0
     10    63218.0
     11    55794 0
```

```
[ ]: from sklearn.model_selection import train_test_split
```

```
[ ]: x_train,x_test,y_train,y_test = train_test_split(x,y,test_size=0.2,random_state=16)
```

```
[ ]: x_train,x_test,y_train,y_test
```

```
[ ]: (    YearsExperience
     22             7.9
     11             4.0
     3              2.0
     13             4.1
     26             9.5
     17             5.3
```

```python
from sklearn.linear_model import LinearRegression
```

```python
slr = LinearRegression()
```

```python
slr.fit(x_train,y_train)
```

```
▼ LinearRegression  ⓘ ⓘ
LinearRegression()
```

```python
y_train_pred = slr.predict(x_train)
```

```python
from sklearn.metrics import r2_score
```

```python
r2_score(y_train,y_train_pred)
```

```
0.9682256656957373
```

```python
y_test_pred = slr.predict(x_test)
```

```python
r2_score(y_test,y_test_pred)
```

```
0.7949890249259295
```