```
import seaborn as sns
import numpy as np
import pandas as pd
from sklearn.model_selection import train_test_split
from sklearn.linear_model import LinearRegression
from sklearn.metrics import mean_squared_error

df=pd.read_csv(r"C:\Users\ASUS\Documents\pythonStack\DS_PR\
Salary_Data.csv")
df.head()
```

	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

```
df=df.dropna()

x=df['YearsExperience']
y=de['Salary']

xtrain,xtest,ytrain,ytest=train_test_split(x,y,test_size=20)

model=LinearRegression()

xtrain
```

```
20     6.8
28    10.3
11     4.0
3      2.0
23     8.2
29    10.5
21     7.1
18     5.9
5      2.9
9      3.7
Name: YearsExperience, dtype: float64
```

```
xtrain=xtrain.to_frame()

model.fit(xtrain,ytrain)
```

```
LinearRegression()
```

```
predicted_salary = model.predict([[15]])
print("Predicted salary for 15 years of experience: \n\n->",
predicted_salary[0])
```

```
Predicted salary for 15 years of experience:

-> 171337.5396536235

C:\Users\ASUS\anaconda3\Lib\site-packages\sklearn\base.py:493:
UserWarning: X does not have valid feature names, but LinearRegression
was fitted with feature names
  warnings.warn(
```