

```
In [2]: import pandas as pd
import numpy as np
from sklearn import linear_model
```

```
In [4]: data = pd.read_csv('hiring.csv')
data
```

Out[4]:

	experience	test_score(out of 10)	interview_score(out of 10)	salary(\$)
0	NaN	8.0	9	50000
1	NaN	8.0	6	45000
2	five	6.0	7	60000
3	two	10.0	10	65000
4	seven	9.0	6	70000
5	three	7.0	10	62000
6	ten	NaN	7	72000
7	eleven	7.0	8	80000

```
In [12]: from word2number import w2n

def word_num(word):
    try:
        return w2n.word_to_num(word)
    except ValueError:
        return word

newdata = data.copy()
newdata['experience'] = data['experience'].apply(word_num)
newdata['experience'].fillna(0, inplace=True)
newdata
```

Out[12]:

	experience	test_score(out of 10)	interview_score(out of 10)	salary(\$)
0	0.0	8.0	9	50000
1	0.0	8.0	6	45000
2	5.0	6.0	7	60000
3	2.0	10.0	10	65000
4	7.0	9.0	6	70000
5	3.0	7.0	10	62000
6	10.0	NaN	7	72000
7	11.0	7.0	8	80000

```
In [27]: mean = int(newdata['test_score(out of 10)'].mean())
newdata['test_score(out of 10)'].fillna(mean, inplace=True)
```

```
In [28]: newdata
```

Out[28]:

	experience	test_score(out of 10)	interview_score(out of 10)	salary(\$)
0	0.0	8.0	9	50000
1	0.0	8.0	6	45000
2	5.0	6.0	7	60000
3	2.0	10.0	10	65000
4	7.0	9.0	6	70000
5	3.0	7.0	10	62000
6	10.0	7.0	7	72000
7	11.0	7.0	8	80000

```
In [31]: model = linear_model.LinearRegression()
model.fit(newdata[['experience', 'test_score(out of 10)', 'interview_score(out of 10)']], newdata['salary($)'])
```

```
Out[31]: ▼ LinearRegression
LinearRegression()
```

```
In [32]: model.predict([[2, 9, 6], [12, 10, 10]])
```

```
C:\Users\User\AppData\Local\Programs\Python\Python311\Lib\site-packages\sklearn\base.py:465: UserWarning: X does not have valid feature names, but LinearRegression was fitted with feature names
  warnings.warn(
```

```
Out[32]: array([53713.86677124, 93747.79628651])
```

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