

```
In [7]: import pandas as pd
import numpy as np
from sklearn import linear_model
from word2number import w2n
```

```
In [8]: !pip install word2number

Requirement already satisfied: word2number in c:\users\hp\anaconda3\lib\site-package
s (1.1)
```

```
In [9]: df=pd.read_csv('https://raw.githubusercontent.com/codebasics/py/master/ML/2_linear_r
df
```

Out[9]:

	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 [10]: df.experience=df.experience.fillna("zero")
df
```

Out[10]:

	experience	test_score(out of 10)	interview_score(out of 10)	salary(\$)
0	zero	8.0	9	50000
1	zero	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 [11]: df.experience=df.experience.apply(w2n.word_to_num)
df
```

Out[11]:

	experience	test_score(out of 10)	interview_score(out of 10)	salary(\$)
0	0	8.0	9	50000
1	0	8.0	6	45000
2	5	6.0	7	60000
3	2	10.0	10	65000
4	7	9.0	6	70000
5	3	7.0	10	62000
6	10	NaN	7	72000
7	11	7.0	8	80000

```
In [14]: import math
median_test_score=math.floor(df['test_score(out of 10)'].mean())
median_test_score
```

Out[14]: 7

```
In [15]: df['test_score(out of 10)']= df['test_score(out of 10)'].fillna(median_test_score)
df
```

Out[15]:

	experience	test_score(out of 10)	interview_score(out of 10)	salary(\$)
0	0	8.0	9	50000
1	0	8.0	6	45000
2	5	6.0	7	60000
3	2	10.0	10	65000
4	7	9.0	6	70000
5	3	7.0	10	62000
6	10	7.0	7	72000
7	11	7.0	8	80000

```
In [20]: model=linear_model.LinearRegression()
model.fit(df[['experience','test_score(out of 10)','interview_score(out of 10)']],df
```

Out[20]: LinearRegression()

```
In [21]: model.predict([[2,9,6]])
```

Out[21]: array([53713.86677124])

```
In [22]: model.predict([[12,10,10]])
```

Out[22]: array([93747.79628651])

```
In [ ]:
```