```
import pandas as pd
import numpy as np
from sklearn import linear_model
from word2number import w2n
```

```
pip install word2number
```

```
Collecting word2number
  Downloading https://files.pythonhosted.org/packages/4a/29/a31940c848521f0725f0df6b25dc
Building wheels for collected packages: word2number
  Building wheel for word2number (setup.py) ... done
  Created wheel for word2number: filename=word2number-1.1-cp37-none-any.whl size=5584 sh
  Stored in directory: /root/.cache/pip/wheels/46/2f/53/5f5c1d275492f2fce1cdab9a9bb12d49
Successfully built word2number
Installing collected packages: word2number
Successfully installed word2number-1.1
```

```
df = pd.read_csv('/content/drive/MyDrive/Colab Notebooks/hiring.csv')
df
```

	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		9.0	6	70000
5	three	7.0	10	62000
6	ten	NaN	7	72000
7	eleven	7.0	8	80000

Saved successfully!

```
df.experience = df.experience.fillna('zero')
df
```

	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

```
df.experience = df.experience.apply(w2n.word_to_num)
df
```

	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

```
mean_test_score = math.floor(df['test_score(out of 10)'].mean())
mean_test_score
```

```
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```

Saved successfully!

```
df['test_score(out of 10)'].fillna(mean_test_score)
df
```

experience test_score(out of 10) interview_score(out of 10) salary($)

```
reg = linear_model.LinearRegression()
reg.fit(df[['experience', 'test_score(out of 10)', 'interview_score(out of 10)']], df['salary
```

```
LinearRegression(copy_X=True, fit_intercept=True, n_jobs=None, normalize=False)
```

```
reg.coef_
```

```
array([2922.26901502, 2221.30909959, 2147.48256637])
```

```
reg.intercept_
```

```
14992.65144669314
```

```
reg.predict([[2, 9, 6]])
```

```
array([53713.86677124])
```

```
2922.26901502*2 + 2221.30909959*9 + 2147.48256637*6 + 14992.651446693118
```

```
53713.86677126312
```

```
reg.predict([[12, 10, 10]])
```

```
array([93747.79628651])
```

```
2922.26901502*12 + 2221.30909959*10 + 2147.48256637*10 + 14992.651446693118
```

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