

# HR's Hiring\_Salary\_Predictor(PROJECT)

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# THIS PROJECT HELPS HR TO PREDICT THE SALARY OF NEWLY HIRED PERSON
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In [1]: import pandas as pd
import numpy as np
import matplotlib.pyplot as plt
from sklearn import linear_model
import warnings
warnings.filterwarnings("ignore", category=UserWarning)
warnings.simplefilter(action='ignore', category=FutureWarning)
```

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In [2]: df=pd.read_csv("hiring.csv")
```

```
In [3]: df
```

```
Out[3]:
```

	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 [4]: import math
df.experience=df.experience.fillna('zero')
test_medians=math.floor(df['test_score(out of 10)'].median())
df['test_score(out of 10)']=df['test_score(out of 10)'].fillna(test_
```

```
In [6]: from word2number import w2n
df['experience'] = df['experience'].apply(w2n.word_to_num)
df
```

```
Out[6]:
```

	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	8.0	7	72000
7	11	7.0	8	80000

```
In [7]: reg=linear_model.LinearRegression()
reg.fit(df[['experience','test_score(out of 10)','interview_score(o
```

```
Out[7]:
```

▼ LinearRegression

LinearRegression()

```
In [8]: reg.predict([[2,9,6]])
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Out[8]: array([53205.96797671])
```

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In [9]: reg.predict([[12,10,10]])
```

```
Out[9]: array([92002.18340611])
```

```
In [10]: import pickle
# save model
with open('linearRegressionModel_Salary_Prediction','wb') as f:
    pickle.dump(reg,f)
```

```
In [11]: # save model
with open('linearRegressionModel_Salary_Prediction','rb') as f:
    load_model=pickle.load(f)
```

```
In [14]: pred=load_model.predict([[2, 10, 4]]) # (experience, test score, in
print(pred)
```

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[50641.19359534]
```