```
#Exp No : 9

#Aim : To perform Simple Linear Regression and find out the
coefficients of it.

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# Roll no : 08
# Sec:C
# Subject : Data Science

import pandas as pd
import matplotlib.pyplot as plt
import seaborn as sns
import numpy as np

import os

os.getcwd()
```

```
'C:\\Users\\HP'
```

```
os.chdir("C:\\Users\\HP\\Desktop")

df=pd.read_csv("Salary.csv")

df.head()
```

```
   YearsExperience  Salary
0              1.1   39343
1              1.3   46205
2              1.5   37731
3              2.0   43525
4              2.2   39891
```

```
df.tail()
```

```
    YearsExperience  Salary
30             11.2  127345
31             11.5  126756
32             12.3  128765
33             12.9  135675
34             13.5  139465
```

```
df.info()
```

```
<class 'pandas.core.frame.DataFrame'>
RangeIndex: 35 entries, 0 to 34
Data columns (total 2 columns):
 #   Column           Non-Null Count  Dtype
---  ------           --------------  -----
 0   YearsExperience  35 non-null     float64
 1   Salary           35 non-null     int64
```

```
dtypes: float64(1), int64(1)
memory usage: 688.0 bytes
```

```
df.describe()
```

```
       YearsExperience         Salary
count         35.000000      35.000000
mean           6.308571   83945.600000
std            3.618610   32162.673003
min            1.100000   37731.000000
25%            3.450000   57019.000000
50%            5.300000   81363.000000
75%            9.250000  113223.500000
max           13.500000  139465.000000
```

```
df.shape
```

```
(35, 2)
```

```
df.size
```

```
70
```

```
df.ndim
```

```
2
```

```
df.isnull()
```

```
    YearsExperience  Salary
0             False   False
1             False   False
2             False   False
3             False   False
4             False   False
5             False   False
6             False   False
7             False   False
8             False   False
9             False   False
10            False   False
11            False   False
12            False   False
13            False   False
14            False   False
15            False   False
16            False   False
17            False   False
18            False   False
19            False   False
20            False   False
```

```
21              False   False
22              False   False
23              False   False
24              False   False
25              False   False
26              False   False
27              False   False
28              False   False
29              False   False
30              False   False
31              False   False
32              False   False
33              False   False
34              False   False
```