```
import pandas as pd
import numpy as np
import seaborn as s
from sklearn import linear_model
import matplotlib.pyplot as plt
```

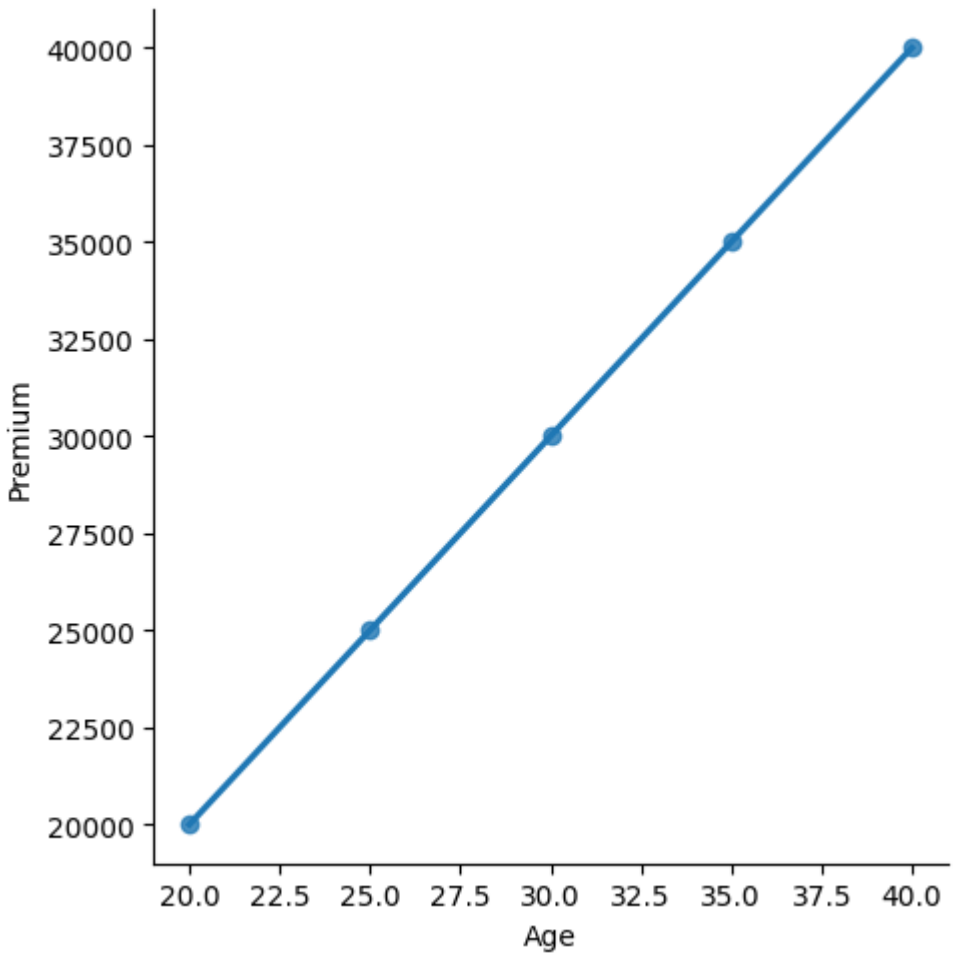
```
df=pd.read_csv('/content/Book1.csv')
```

```
df
```

	Age	Premium
0	20	20000
1	25	25000
2	30	30000
3	35	35000
4	40	40000

```
s.lmplot(x='Age',y='Premium',data=df)
```

```
<seaborn.axisgrid.FacetGrid at 0x7e527042fc10>
```




```
plt.scatter(df.Age,df.Premium,color='red')
```

```
<matplotlib.collections.PathCollection at 0x7e526d8be050>
```

```
model=linear_model.LinearRegression()
```

```
model.fit(df[['Age']],df[['Premium']])
```

```
LinearRegression()
```

```
model.predict([[50]])
```

```
/usr/local/lib/python3.10/dist-packages/sklearn/base.py:439: UserWarning: X does not have valid feature names, but LinearRegress
  warnings.warn(
array([[50000.]])
```

```
model.coef_
```

```
array([[1000.]])
```

```
model.intercept_
```

```
array([3.63797881e-12])
```

```
#y=mx+c
1000*50+3.63797881e-12
```

```
50000.00000000001
```

```
plt.show()
```