In [ ]:
```python
#import libraries
import pandas as pd
import numpy as np
from sklearn.linear_model import LinearRegression
```

In [ ]:
```python
# import data
df= pd.read_csv("online_data.csv")
df.head()
```

Out[ ]:

	Well	Por	Perm	AI	Brittle	TOC	VR	Prod
0	1	12.08	2.92	2.80	81.40	1.16	2.31	4165.196191
1	2	12.38	3.53	3.22	46.17	0.89	1.88	3561.146205
2	3	14.02	2.59	4.01	72.80	0.89	2.72	4284.348574
3	4	17.67	6.75	2.63	39.81	1.08	1.88	5098.680869
4	5	17.52	4.57	3.18	10.94	1.51	1.90	3406.132832

In [ ]:
```python
X= df[['Perm', 'Brittle', 'TOC']]
y= df[['Prod']]
```

In [ ]:
```python
# create and fit your model
model= LinearRegression().fit(X, y)
model
```

Out[ ]:
```
LinearRegression()
```

In [ ]:
```python
model.coef_
```

Out[ ]:
```
array([[315.54763005,  28.70119215, 993.49849856]])
```

In [ ]:
```python
model.intercept_
```

Out[ ]:
```
array([578.34598395])
```

In [ ]:
```python
model.score(X,y)
```

Out[ ]:
```
0.8131043599673955
```

In [ ]:
```python
model.predict([[2.92, 81.40, 1.16]])
```

```
C:\Users\Javeria\AppData\Local\Programs\Python\Python310\lib\site-packages\sklearn\base.
py:450: UserWarning: X does not have valid feature names, but LinearRegression was fitte
d with feature names
  warnings.warn(
```

Out[ ]:   array([[4988.48036333]])

splitting data

In [ ]:
```python
from sklearn.model_selection import train_test_split
X_test, X_train, y_test, y_train = train_test_split(X, y, test_size= 0.2, random_state=
```

In [ ]:
```python
# import libraries
import pandas as pd
import matplotlib.pyplot as plt
 plt.scatter(X, y)
 plt.plot(X_train, model.predict(X_train), color = "red")
 plt.xlabel([['Perm', 'Brittle','TOC']])
 plt.ylabel([['Prod']])
 plt.title("train plot")
 plt.show()
```

  Input In [49]
    plt.scatter(X, y)
    ^
IndentationError: unexpected indent