Data science Task-4

```python
import pandas as pd

from sklearn.model_selection import train_test_split

from sklearn.linear_model import LinearRegression

from sklearn.metrics import mean_squared_error

import matplotlib.pyplot as plt

# Load your dataset

df = pd.read_csv('https://docs.google.com/spreadsheets/d/e/2PACX-1vRTK2NvcndgPX41Czu6Ft2Ho_nE-z50BgTqdzwFW0rsJ2nvyNLe2DoIg1COzUbgw80oaRBjfy5-WtFk/pubhtml')

# Assuming you have a target column 'target_column' and a feature column 'feature_column'

X = df[['column1']]

y = df['column2']

# Split the dataset into training and testing sets

X_train, X_test, y_train, y_test = train_test_split(X, y, test_size=0.2, random_state=42)

# Create a linear regression model

model = LinearRegression()

# Train the model

model.fit(X_train, y_train)

# Make predictions on the test set

y_pred = model.predict(X_test)

# Evaluate the model

mse = mean_squared_error(y_test, y_pred)
```

```python
print(f'Mean Squared Error: {mse}')

# Plot the regression line
plt.scatter(X_test, y_test, color='black')
plt.plot(X_test, y_pred, color='blue', linewidth=3)
plt.title('Linear Regression Model')
plt.xlabel('Feature Column')
plt.ylabel('Target Column')
plt.show()
```