

Data science Task-3

```
import pandas as pd

import seaborn as sns

import matplotlib.pyplot as plt

# Load your dataset

df = pd.read_csv('https://docs.google.com/spreadsheets/d/e/2PACX-1vTSS-
TcErkXNk8KB0AljihitwetxeHD2M3R0HJl2QPMAYFq0fxFX4PFKnzA WLDnratlz67DNL6GsZnV/pub?
output=csv')

# Display basic statistics

print(df.describe())

# Correlation matrix heatmap using Seaborn

plt.figure(figsize=(10, 8))

sns.heatmap(df.corr(), annot=True, cmap='coolwarm', fmt=".2f")

plt.title('Correlation Matrix Heatmap')

plt.show()

# Pairplot using Seaborn

sns.pairplot(df, diag_kind='kde')

plt.suptitle('Pairplot of the Dataset', y=1.02)

plt.show()

# Histogram of a specific column

plt.figure(figsize=(8, 6))

sns.histplot(df['column1'], bins=30, kde=True, color='skyblue')

plt.title('Histogram of a Column')

plt.xlabel('Column Values')

plt.ylabel('Frequency')

plt.show()

# Boxplot using Seaborn

plt.figure(figsize=(8, 6))
```

```
sns.boxplot(x='category_column', y='numeric_column', data=df)

plt.title('Boxplot of Numeric Column Grouped
by Category Column')

plt.show()
```