**import pandas as pd**

**import numpy as np**

**import matplotlib.pyplot as plt**

**import seaborn as sns**

**%matplotlib inline**

**sns.set(style="whitegrid")**

**# Replace with your actual Kaggle file path if needed**

**df = pd.read\_csv("titanic.csv")**

**df.head()**

**print("Shape of dataset:", df.shape)**

**print("\nColumn Names:", df.columns.tolist())**

**print("\nData Types:")**

**print(df.dtypes)**

**df.describe()**

**df.isnull().sum()**

**df.drop\_duplicates(inplace=True)**

**df['Age'].fillna(df['Age'].median(), inplace=True)**

**df['Embarked'].fillna(df['Embarked'].mode()[0], inplace=True)**

**df['Cabin'].fillna('Unknown', inplace=True)**

**sns.countplot(x='Survived', data=df)**

**plt.title("Survival Count")**

**plt.show()**

**sns.countplot(x='Survived', hue='Sex', data=df)**

**plt.title("Survival by Gender")**

**plt.show()**

**sns.histplot(df['Age'], kde=True)**

**plt.title("Age Distribution")**

**plt.show()**

**sns.countplot(x='Pclass', hue='Survived', data=df)**

**plt.title("Survival by Passenger Class")**

**plt.show()**

**plt.figure(figsize=(10, 6))**

**sns.heatmap(df.corr(), annot=True, cmap='coolwarm')**

**plt.title("Correlation Heatmap")**

**plt.show()**