**Assignment No 8**

**Code:**

import pandas as pd

import numpy as np

import matplotlib.pyplot as plt

import seaborn as sns

#print(sns.get\_dataset\_names())

df=sns.load\_dataset('titanic')

#print(df)

# Display basic information

print('Information of Dataset:\n', df.info)

print('Shape of Dataset (row x column): ', df.shape)

print('Columns Name: ', df.columns)

print('Total elements in dataset:', df.size)

print('Datatype of attributes (columns):', df.dtypes)

print('First 5 rows:\n', df.head().T)

print('Last 5 rows:\n',df.tail().T)

print('Any 5 rows:\n',df.sample(5).T)

df.head()

sns.set\_style('whitegrid')

sns.displot(df['fare'] ,kde=True)

plt.show()

sns.displot(df['fare'], kde = False)

plt.show()

sns.displot(df['fare'], kde = False, bins = 10)

plt.show()

**Output:**

Information of Dataset:

 <bound method DataFrame.info of      survived  pclass     sex   age  ...  deck  embark\_town  alive  alone

0           0       3    male  22.0  ...   NaN  Southampton     no  False

1           1       1  female  38.0  ...     C    Cherbourg    yes  False

2           1       3  female  26.0  ...   NaN  Southampton    yes   True

3           1       1  female  35.0  ...     C  Southampton    yes  False

4           0       3    male  35.0  ...   NaN  Southampton     no   True

..        ...     ...     ...   ...  ...   ...          ...    ...    ...

886         0       2    male  27.0  ...   NaN  Southampton     no   True

887         1       1  female  19.0  ...     B  Southampton    yes   True

888         0       3  female   NaN  ...   NaN  Southampton     no  False

889         1       1    male  26.0  ...     C    Cherbourg    yes   True

890         0       3    male  32.0  ...   NaN   Queenstown     no   True

[891 rows x 15 columns]>

Shape of Dataset (row x column):  (891, 15)

Columns Name:  Index(['survived', 'pclass', 'sex', 'age', 'sibsp', 'parch', 'fare',

       'embarked', 'class', 'who', 'adult\_male', 'deck', 'embark\_town',

       'alive', 'alone'],

      dtype='object')

Total elements in dataset: 13365

Datatype of attributes (columns): survived          int64

pclass            int64

sex              object

age             float64

sibsp             int64

parch             int64

fare            float64

embarked         object

class          category

who              object

adult\_male         bool

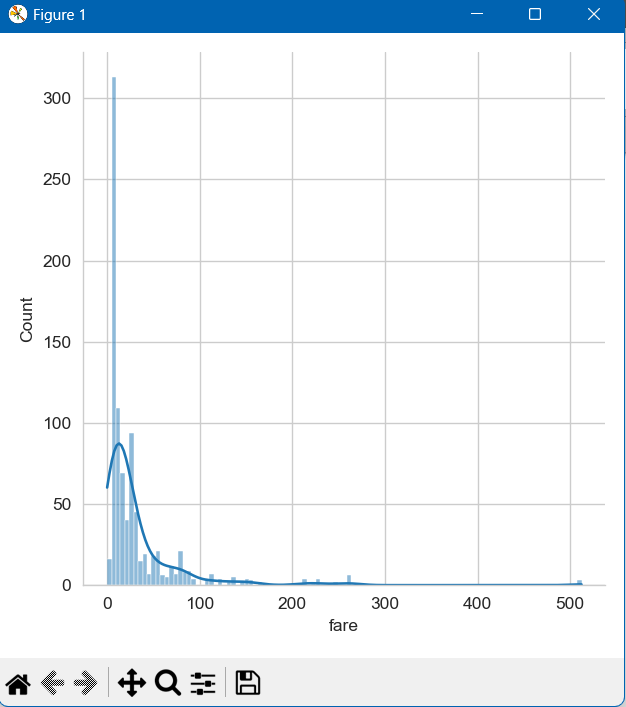
deck           category

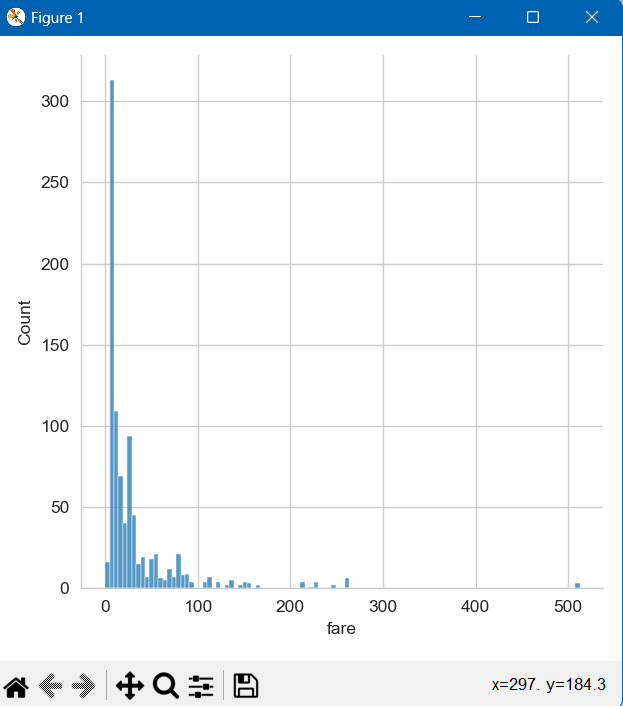
embark\_town      object

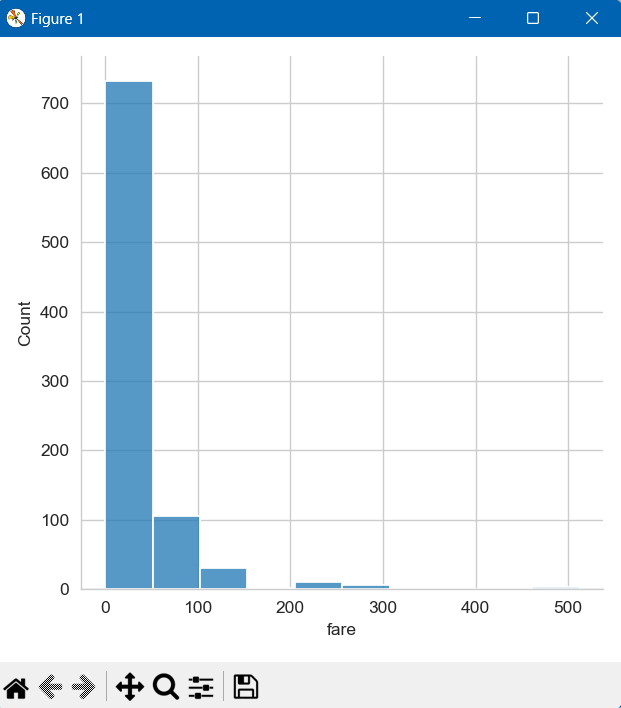
alive            object

alone              bool

dtype: object

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