

## Pract8

```
import seaborn as sns
```

```
# Load the Titanic dataset
```

```
df = sns.load_dataset('titanic')
```

```
# Display the dataset
```

```
df
```

```
# Select relevant columns from the dataset
```

```
df = df[['survived', 'class', 'sex', 'age', 'fare']]
```

```
# df
```

```
# Visualize the relationship between 'age' and 'fare' using a joint plot
```

```
sns.jointplot(x='age', y='fare', data=df)
```

```
# Visualize the relationship between 'age' and 'fare' with 'survived' as a hue
```

```
sns.jointplot(x='age', y='fare', data=df, hue='survived')
```

```
# Visualize the relationship between 'age' and 'fare' with 'class' as a hue
```

```
sns.jointplot(x='age', y='fare', data=df, hue='class')
```

```
# Visualize pair-wise relationships between numeric variables with 'sex' as a hue
```

```
sns.pairplot(df, hue='sex')
```

```
# Countplot for 'sex'
```

```
sns.countplot(x=df['sex'])
```

```
# Countplot for 'class'
```

```
sns.countplot(x=df['class'])
```

```
# Barplot showing the survival rate based on 'sex'
```

```
sns.barplot(x='sex', y='survived', data=df)
```

```
# Barplot showing the survival rate based on both 'sex' and 'class'
```

```
sns.barplot(x='sex', y='survived', hue='class', data=df)
```

```
# Histogram for 'fare'
```

```
sns.histplot(df['fare'])
```

```
# Kernel Density Estimation (KDE) plot for 'fare'
```

```
sns.kdeplot(df['fare'])
```

```
# for (2)
```

```
import seaborn as sns
```

```
import matplotlib.pyplot as plt
```

```
from seaborn import load_dataset
```

```
# Load the Titanic dataset
```

```
titanic_data = load_dataset("titanic")
```

```
# Plotting the histogram
plt.figure(figsize=(10, 6))
sns.histplot(titanic_data['fare'], bins=20, kde=True, color='skyblue')
plt.title('Distribution of Ticket Prices on Titanic')
plt.xlabel('Fare')
plt.ylabel('Frequency')
plt.show()
```