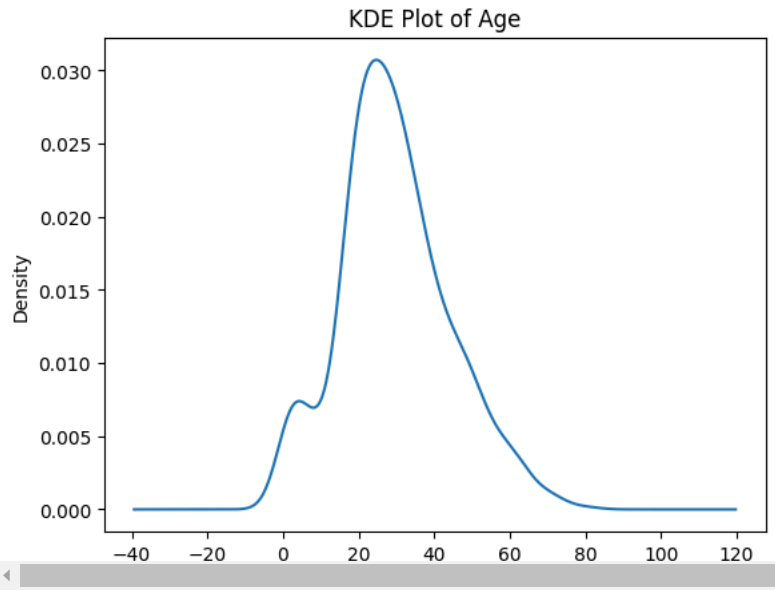
```
import pandas as pd
import seaborn as sns
import numpy as np
import matplotlib.pyplot as plt

# Load the Titanic dataset
df = sns.load_dataset("titanic")
df
```

	survived	pclass	sex	age	sibsp	parch	fare	embarked	class	who	adult_male	deck	embark_town	alive	alone
0	0	3	male	22.0	1	0	7.2500	S	Third	man	True	NaN	Southampton	no	False
1	1	1	female	38.0	1	0	71.2833	C	First	woman	False	C	Cherbourg	yes	False
2	1	3	female	26.0	0	0	7.9250	S	Third	woman	False	NaN	Southampton	yes	True
3	1	1	female	35.0	1	0	53.1000	S	First	woman	False	C	Southampton	yes	False
4	0	3	male	35.0	0	0	8.0500	S	Third	man	True	NaN	Southampton	no	True
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
886	0	2	male	27.0	0	0	13.0000	S	Second	man	True	NaN	Southampton	no	True
887	1	1	female	19.0	0	0	30.0000	S	First	woman	False	B	Southampton	yes	True
888	0	3	female	NaN	1	2	23.4500	S	Third	woman	False	NaN	Southampton	no	False
889	1	1	male	26.0	0	0	30.0000	C	First	man	True	C	Cherbourg	yes	True
890	0	3	male	32.0	0	0	7.7500	Q	Third	man	True	NaN	Queenstown	no	True

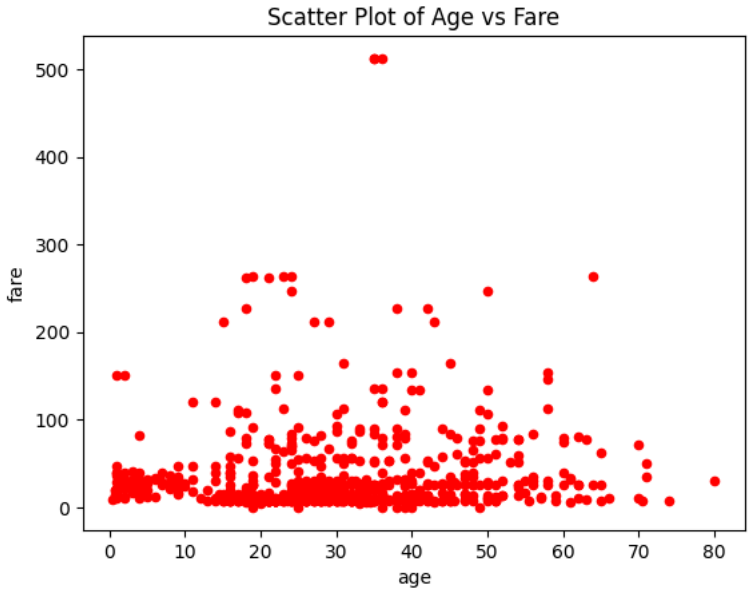
891 rows × 15 columns

Next steps: Generate code with df | View recommended plots | New interactive sheet

```
# KDE plot
df['age'].plot(kind="kde")
plt.title("KDE Plot of Age")
plt.show()
```

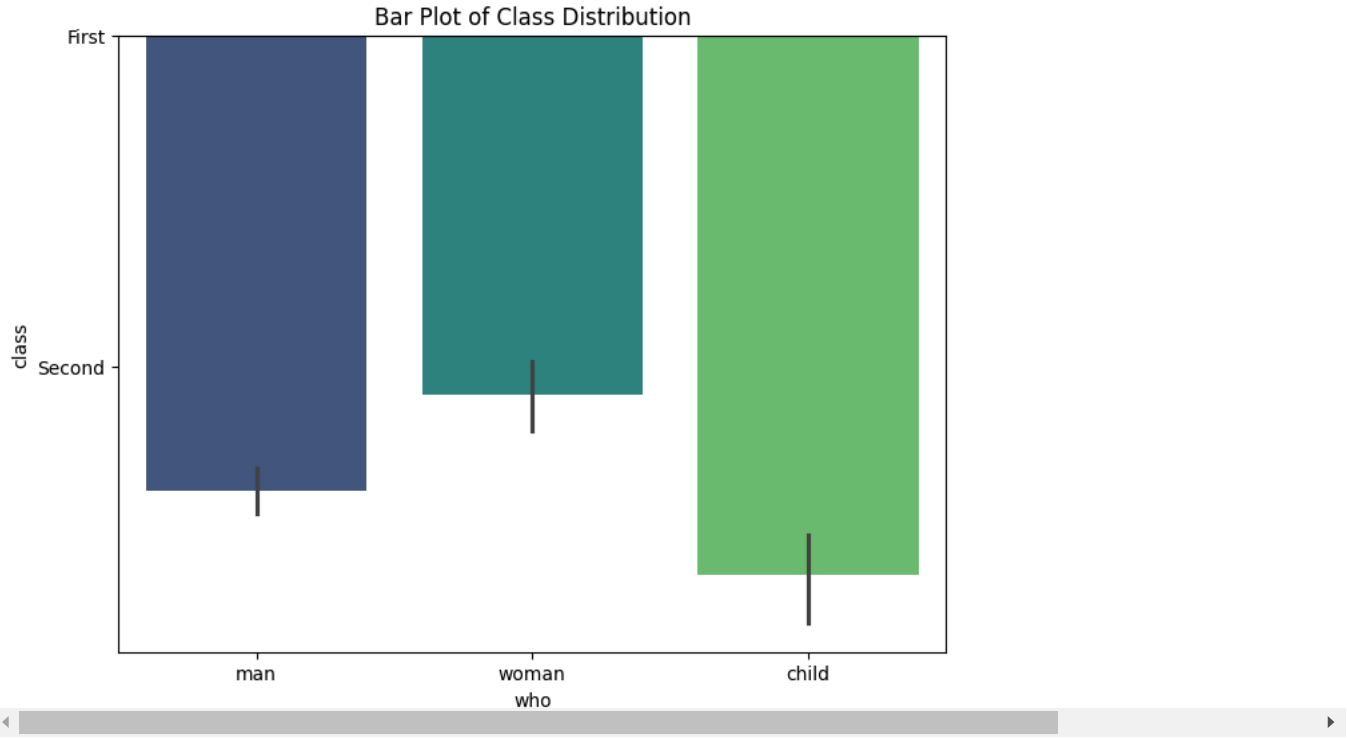



```
# Scatter plot
df.plot(kind="scatter", x="age", y="fare", color='red')
plt.title("Scatter Plot of Age vs Fare")
plt.show()
```



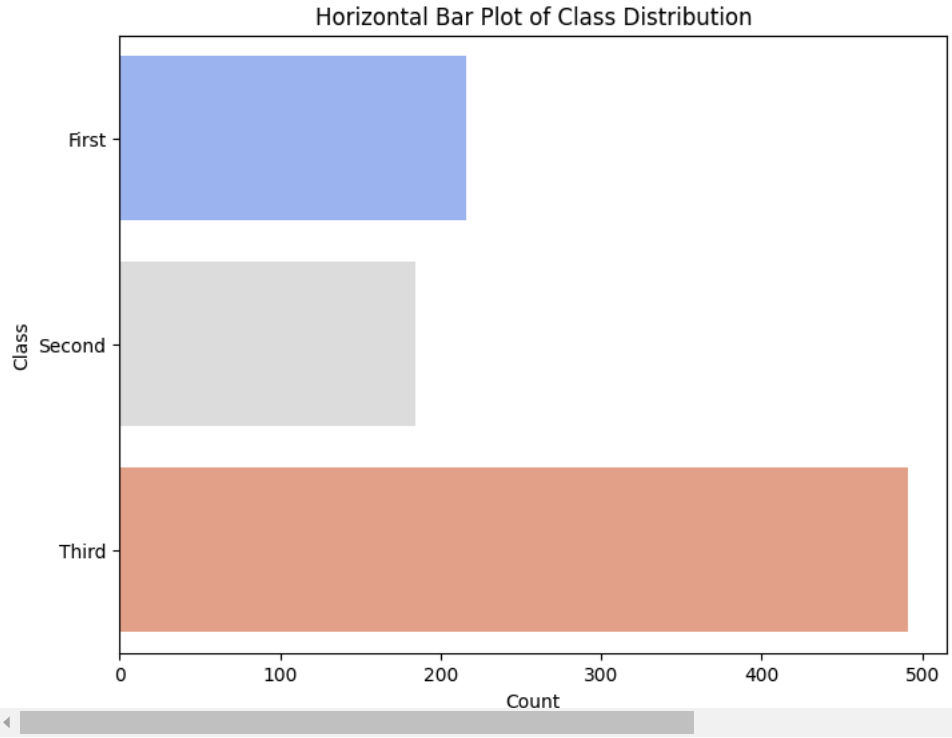

```
# Bar plot
plt.figure(figsize=(8, 6))
sns.barplot(x='who', y='class', data=df, palette = 'viridis')
plt.title("Bar Plot of Class Distribution")
plt.show()
```

```
<ipython-input-19-2e987cd7d247>:3: FutureWarning:

Passing `palette` without assigning `hue` is deprecated and will be removed in v0.14.0. Assign the `x` variable to `hue` and set `le

  sns.barplot(x='who', y='class', data=df, palette = 'viridis')
```



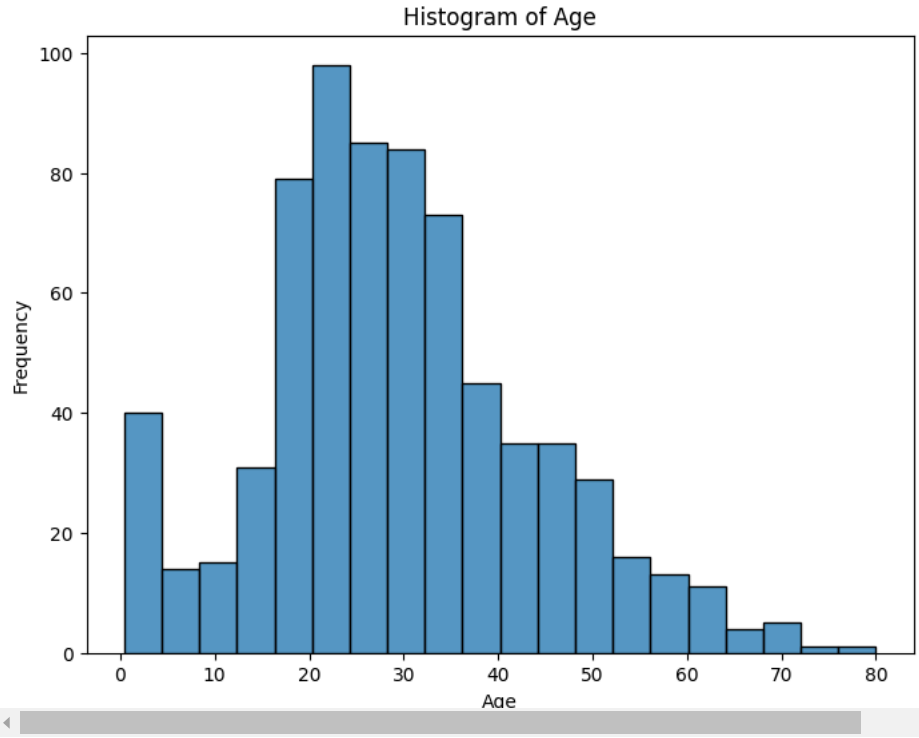

```
# Horizontal bar plot
plt.figure(figsize=(8, 6))
sns.countplot(y='class', data=df, palette = 'coolwarm')
plt.xlabel('Count')
plt.ylabel('Class')
plt.title("Horizontal Bar Plot of Class Distribution")
plt.show()
```

```
<ipython-input-25-aaef117aff48>:3: FutureWarning:

Passing `palette` without assigning `hue` is deprecated and will be removed in v0.14.0. Assign the `y` variable to `hue` and set `le

  sns.countplot(y='class', data=df, palette = 'coolwarm')
```




```
# Histogram
plt.figure(figsize=(8, 6))
sns.histplot(df['age'], bins=20, palette ='viridis')
plt.xlabel('Age')
plt.ylabel('Frequency')
plt.title("Histogram of Age")
plt.show()
```

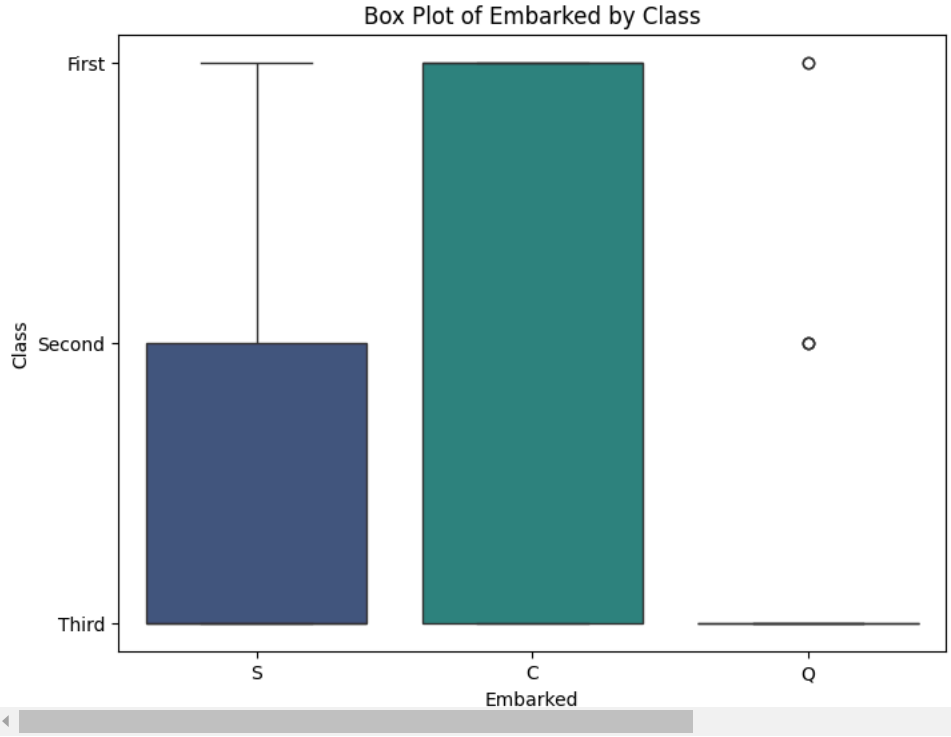
```
<ipython-input-36-2becc39d4462>:3: UserWarning: Ignoring `palette` because no `hue` variable has been assigned.
  sns.histplot(df['age'], bins=20, palette ='viridis')
```



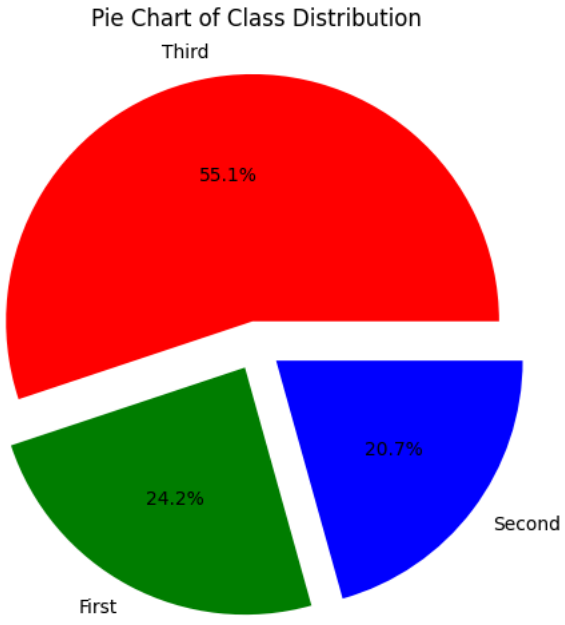

```
# Box plot
plt.figure(figsize=(8, 6))
sns.boxplot(x='embarked', y='class', data=df, palette = 'viridis'
```

```
plt.xlabel('Embarked')
plt.ylabel('Class')
plt.title("Box Plot of Embarked by Class")
```

```
<ipython-input-41-7530cd726326>:3: FutureWarning:

Passing `palette` without assigning `hue` is deprecated and will be removed in v0.14.0. Assign the `x` variable to `hue` and set `le

  sns.boxplot(x='embarked', y='class', data=df, palette = 'viridis')
```

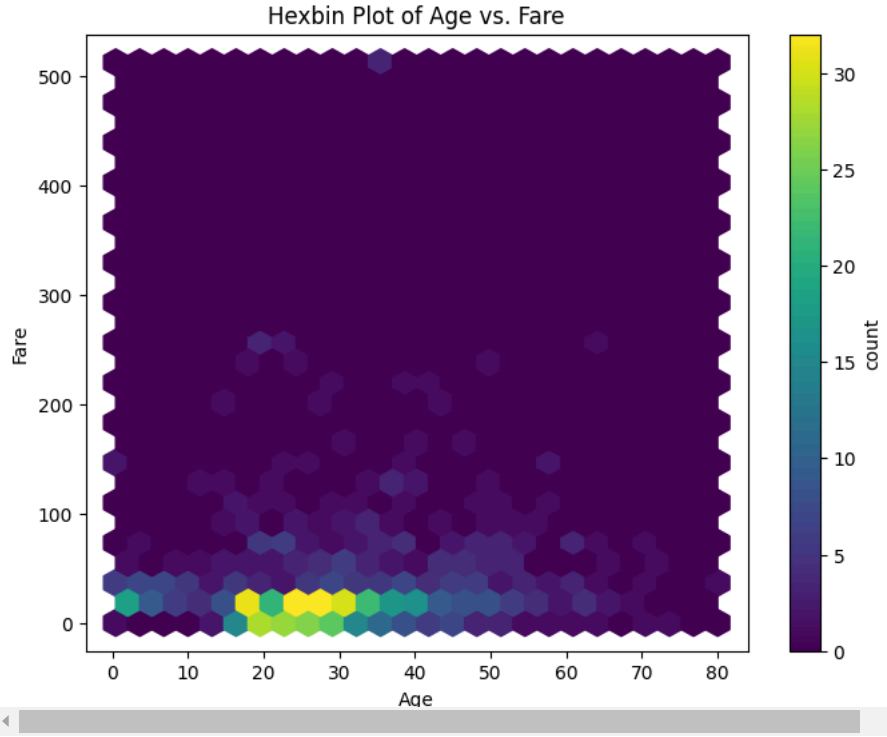



```
# Pie chart
class_counts = df['class'].value_counts()
plt.figure(figsize=(8, 6))
plt.pie(class_counts, labels=class_counts.index, autopct='%1.1f%%', explode=[0.1, 0.1, 0.1], co
plt.title("Pie Chart of Class Distribution")
plt.show()
```



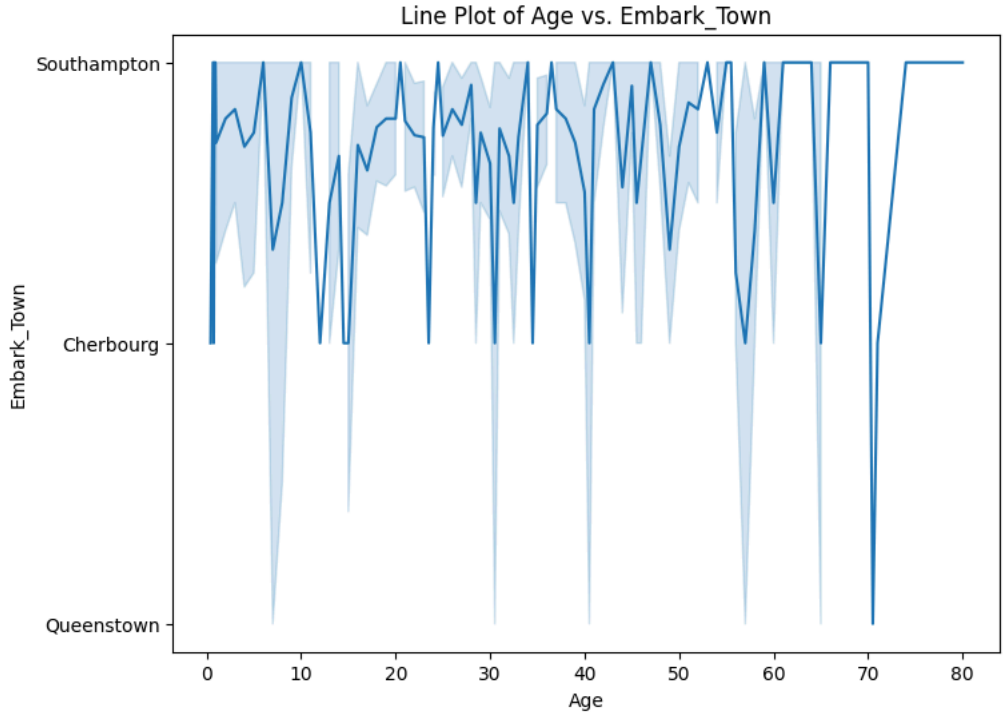

```
# Hexbin plot
plt.figure(figsize=(8, 6))
```

```
plt.hexbin(x=df['age'], y=df['fare'], gridsize=25, cmap='viridis'
plt.colorbar(label='count')
plt.xlabel('Age')
plt.ylabel('Fare')
plt.title("Hexbin Plot of Age vs. Fare")
```




```
# Line plot
plt.figure(figsize=(8, 6))
sns.lineplot(x='age', y='embark_town', data=df, palette = 'viridis')
plt.xlabel('Age')
plt.ylabel('Embark_Town')
plt.title("Line Plot of Age vs. Embark_Town")
plt.show()
```

```
<ipython-input-55-181eb7c5f334>:3: UserWarning: Ignoring `palette` because no `hue` variable has been assigned.
  sns.lineplot(x='age', y='embark_town', data=df, palette = 'viridis')
```




```
Start coding or generate with AI.
```