

practical-08

March 8, 2025

```
[1]: import pandas as pd
import seaborn as sns
import matplotlib.pyplot as plt
```

```
[2]: # Load the Titanic dataset
df = sns.load_dataset('titanic')
```

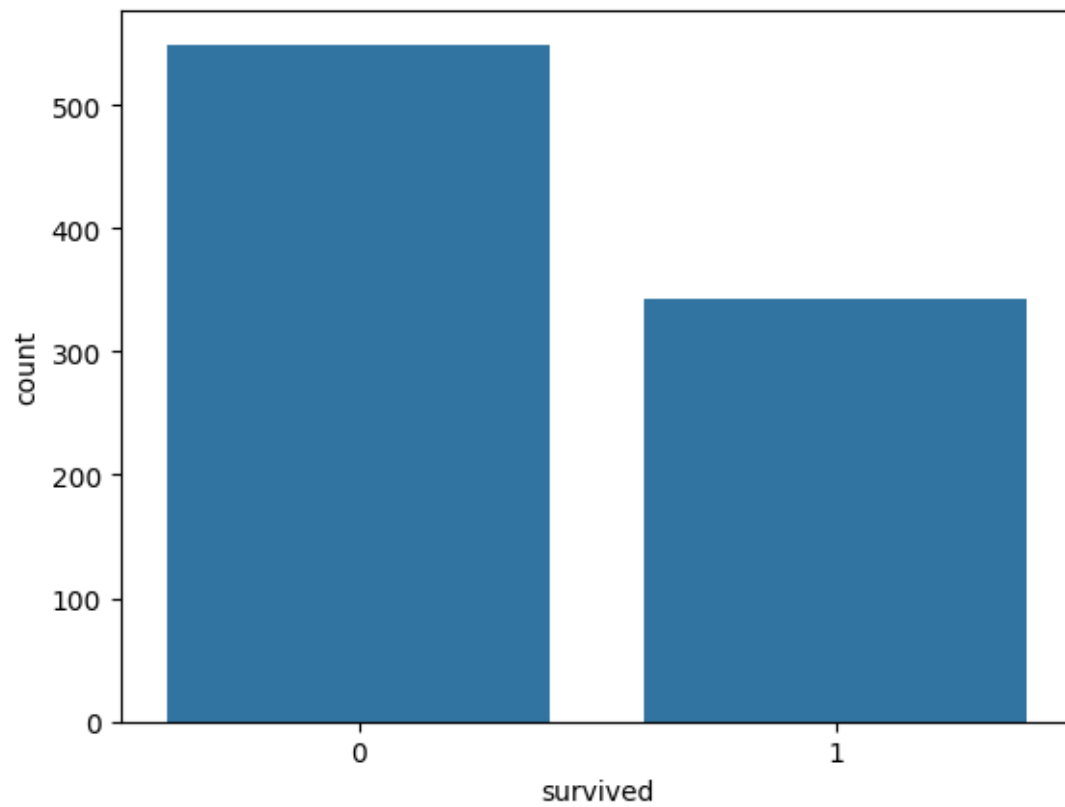
```
[3]: # Display the first few rows of the dataset
print(df.head())
```

	survived	pclass	sex	age	sibsp	parch	fare	embarked	class	\
0	0	3	male	22.0	1	0	7.2500	S	Third	
1	1	1	female	38.0	1	0	71.2833	C	First	
2	1	3	female	26.0	0	0	7.9250	S	Third	
3	1	1	female	35.0	1	0	53.1000	S	First	
4	0	3	male	35.0	0	0	8.0500	S	Third	

	who	adult_male	deck	embark_town	alive	alone
0	man	True	NaN	Southampton	no	False
1	woman	False	C	Cherbourg	yes	False
2	woman	False	NaN	Southampton	yes	True
3	woman	False	C	Southampton	yes	False
4	man	True	NaN	Southampton	no	True

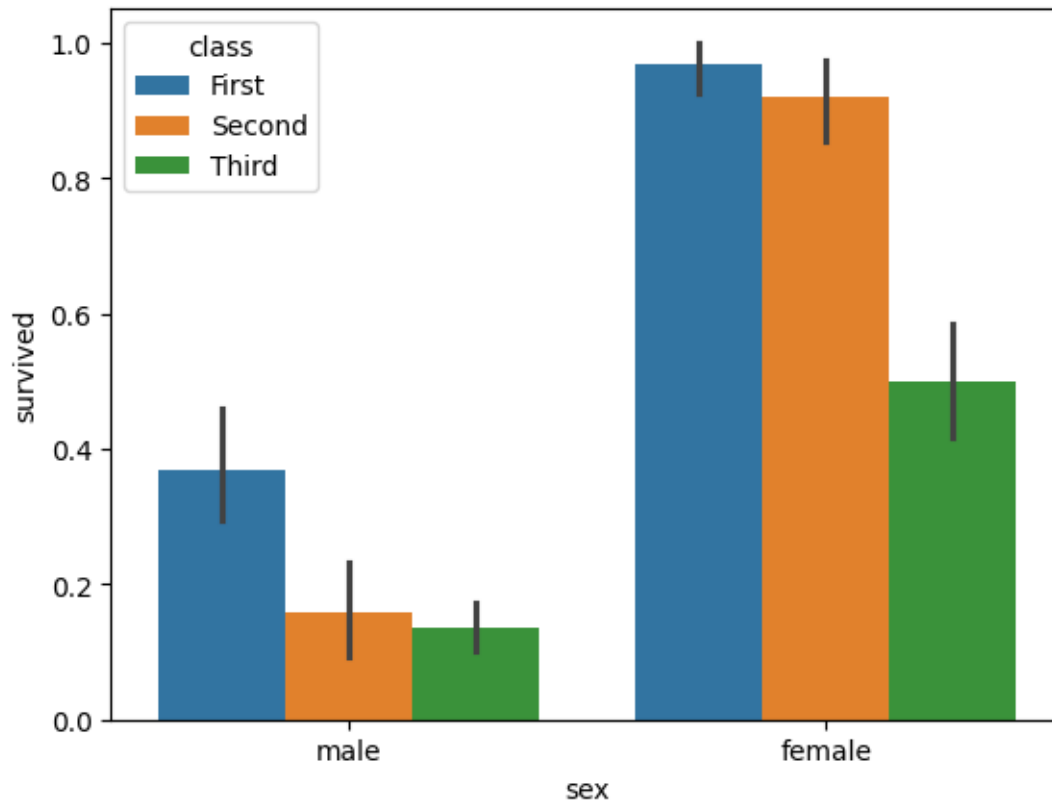
```
[4]: # Countplot:
sns.countplot(x='survived', data=df)
```

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[4]: <Axes: xlabel='survived', ylabel='count'>
```



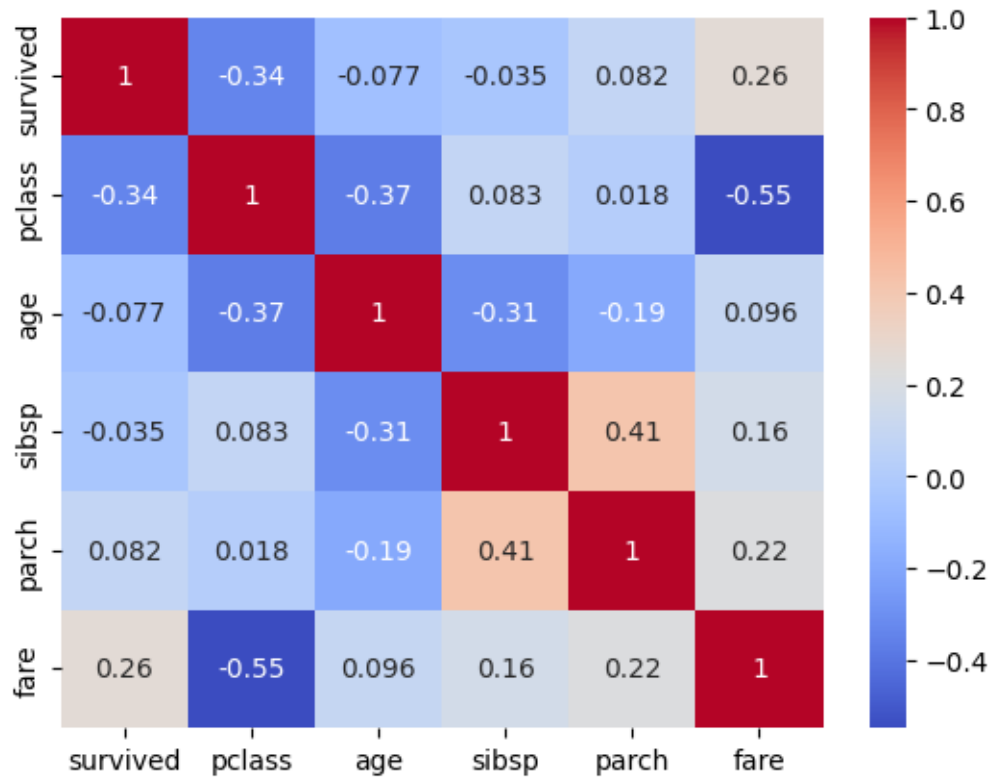
```
[5]: # Barplot:  
sns.barplot(x='sex', y='survived', hue='class', data=df)
```

```
[5]: <Axes: xlabel='sex', ylabel='survived'>
```



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[6]: # Heatmap:  
# Select only numeric columns  
df_numeric = df.select_dtypes(include=['float64', 'int64'])  
  
# Create correlation matrix and heatmap  
sns.heatmap(df_numeric.corr(), annot=True, cmap='coolwarm')
```

[6]: <Axes: >



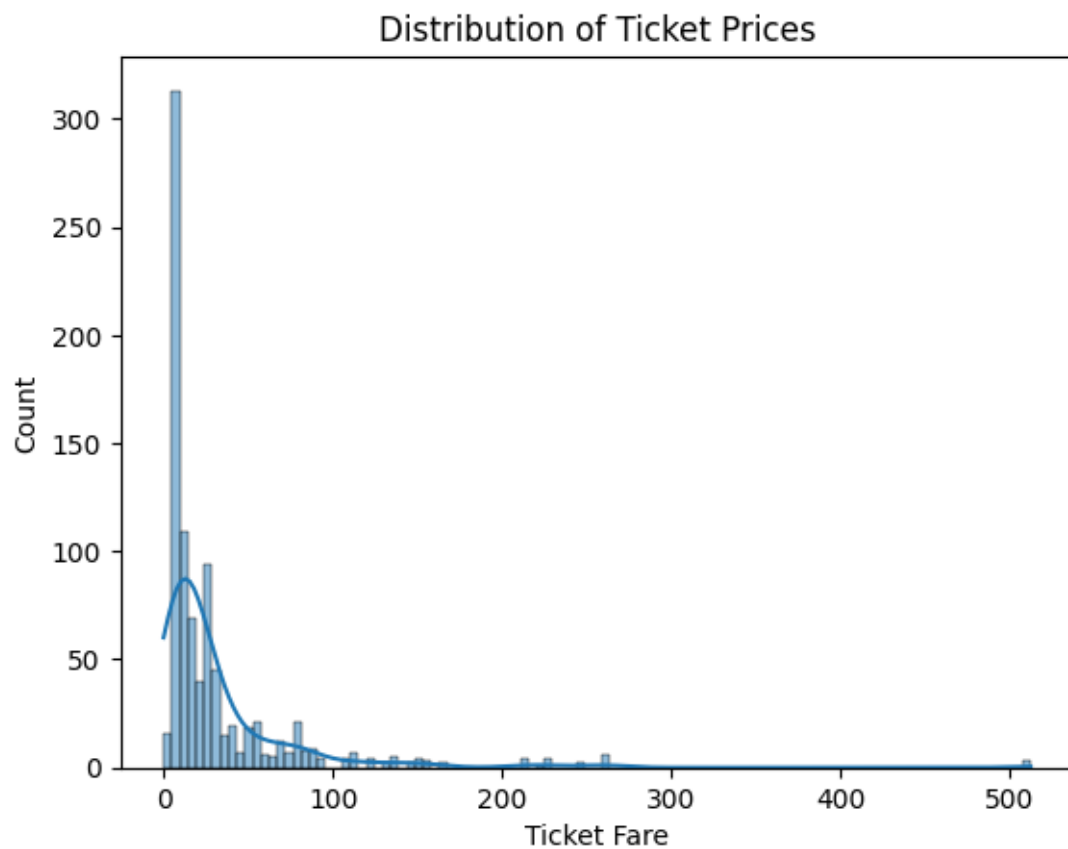
Part 2

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[7]: # Load the Titanic dataset
df = sns.load_dataset('titanic')

# Plot histogram of ticket prices
sns.histplot(data=df, x='fare', kde=True)

# Set plot title and labels
plt.title('Distribution of Ticket Prices')
plt.xlabel('Ticket Fare')
plt.ylabel('Count')

# Display the plot
plt.show()
```



[]: