Practical 8

Title: Data Visualization I

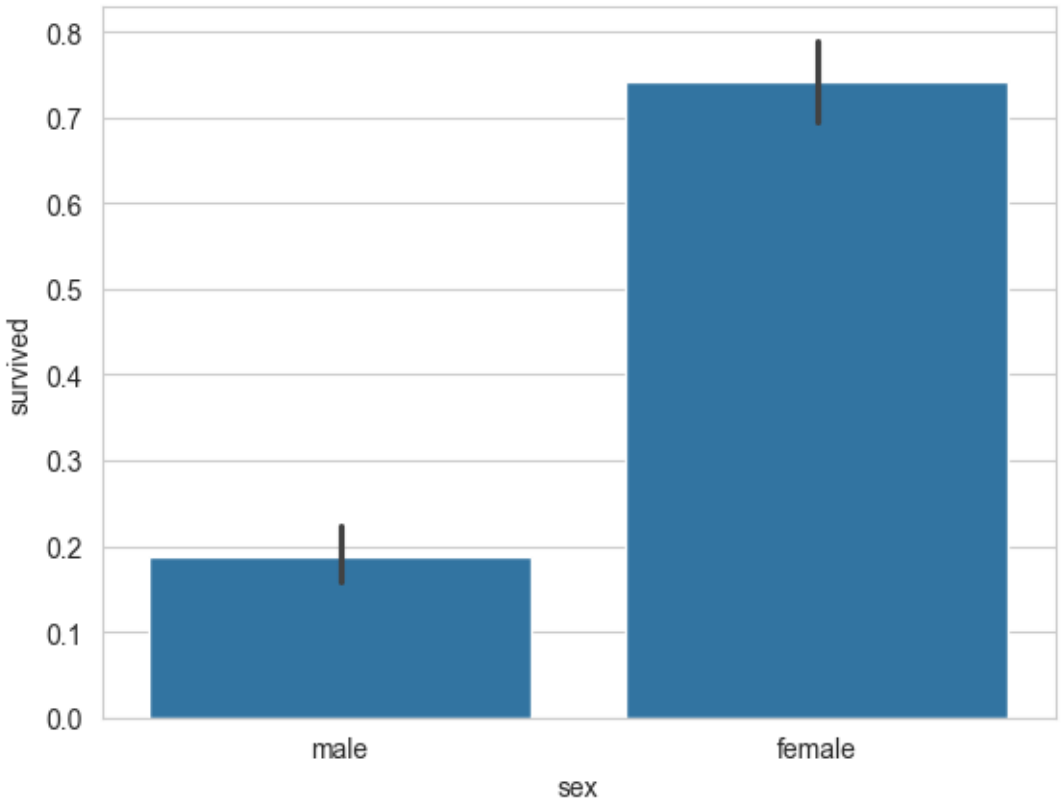
1. Use the inbuilt dataset 'titanic'. The dataset contains 891 rows and contains information about the passengers who boarded the unfortunate Titanic ship. Use the Seaborn library to see if we can find any patterns in the data.

[ ]:
```
import seaborn as sns
```

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

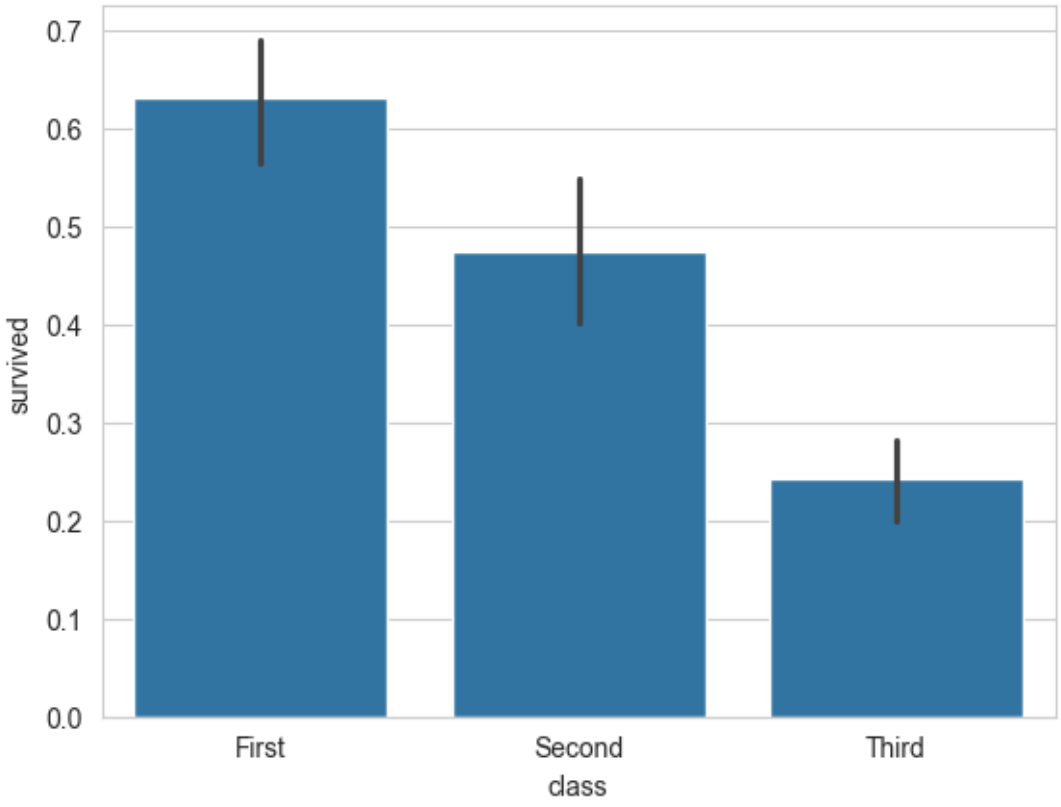
[ ]:
```
sns.set_style('whitegrid')
sns.barplot(x='sex', y='survived', data=titanic)
```

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



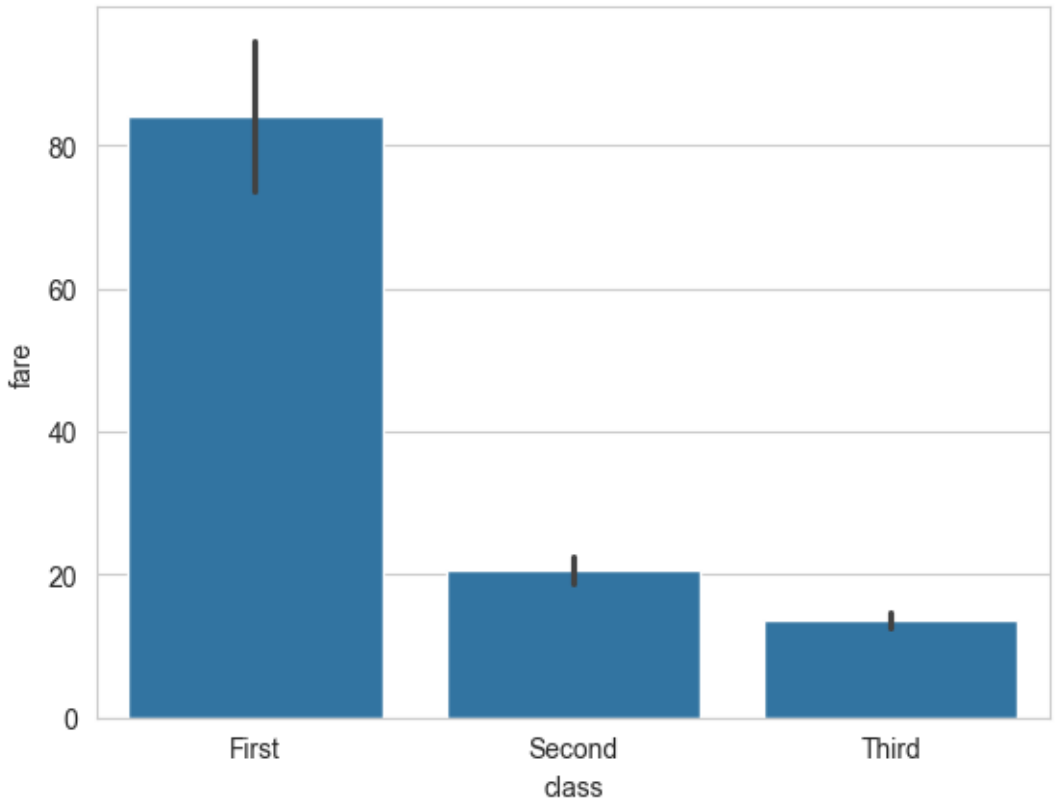
[ ]:
```
sns.set_style('whitegrid')
sns.barplot(x='class', y='survived', data=titanic)
```

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



[ ]:
```
sns.barplot(x='class', y='fare', data=titanic)
```

[ ]:
```
<Axes: xlabel='class', ylabel='fare'>
```



2. Write a code to check how the price of the ticket (column name: 'fare') for each passenger is distributed by plotting a histogrm.a

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

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

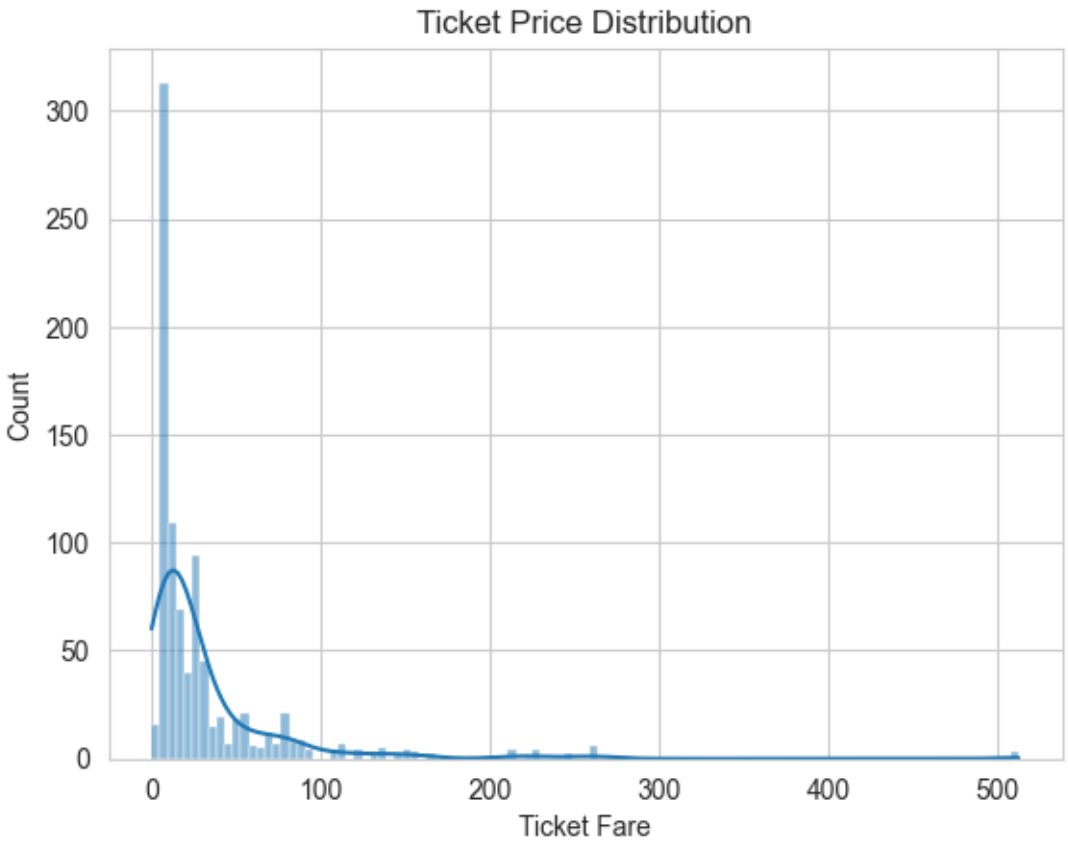
[ ]:
```
# Set the plotting style
sns.set_style('whitegrid')
```

[ ]:
```
# Plot the histogram of ticket prices
sns.histplot(x='fare', data=titanic, kde=True)

# Set the title and labels
plt.title('Ticket Price Distribution')
plt.xlabel('Ticket Fare')
plt.ylabel('Count')

# Display the plot
```

```
plt.show()
```


Ticket Price Distribution
Count
300
250
200
150
100
50
0
0
100
200
300
400
500
Ticket Fare