

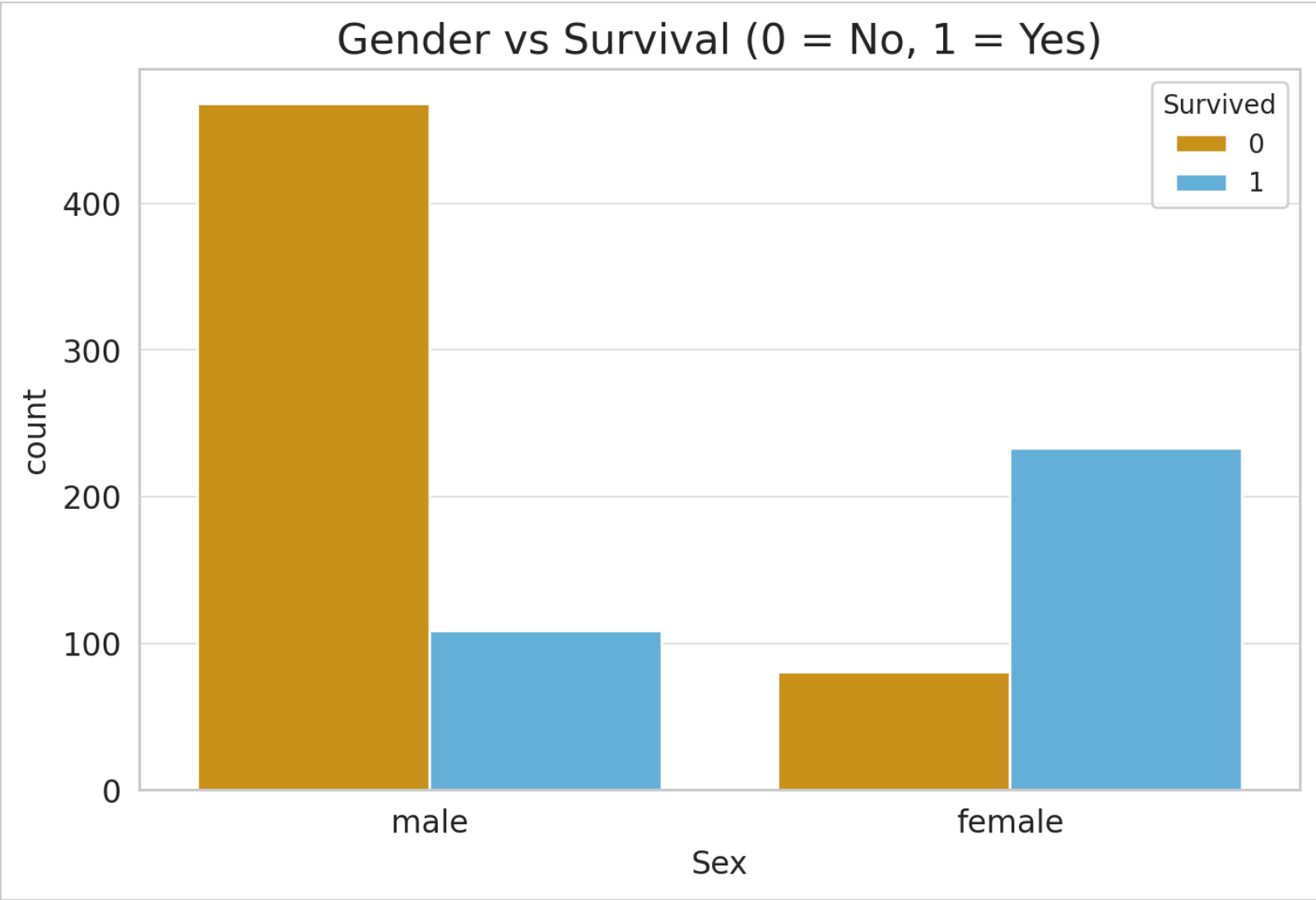
Titanic - Exploratory Data Analysis

Dataset: train.csv (rows: 891, columns: 12)

Summary

- Women and children had higher survival rates.
- 1st class passengers survived more than 3rd class passengers.
- Higher fare passengers generally had higher survival.

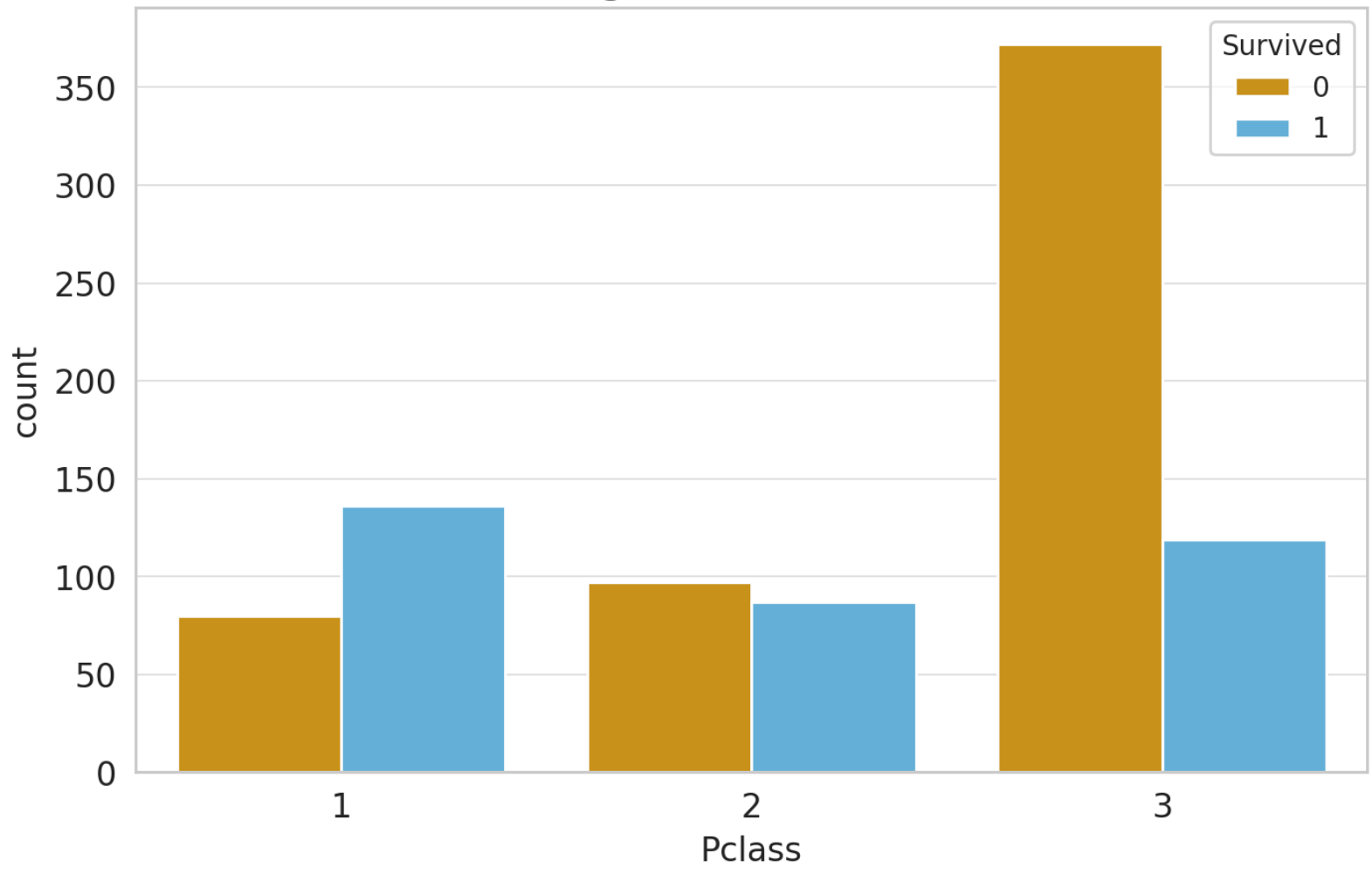
Gender vs Survival



Observation: Women had higher survival than men.

Pclass vs Survival

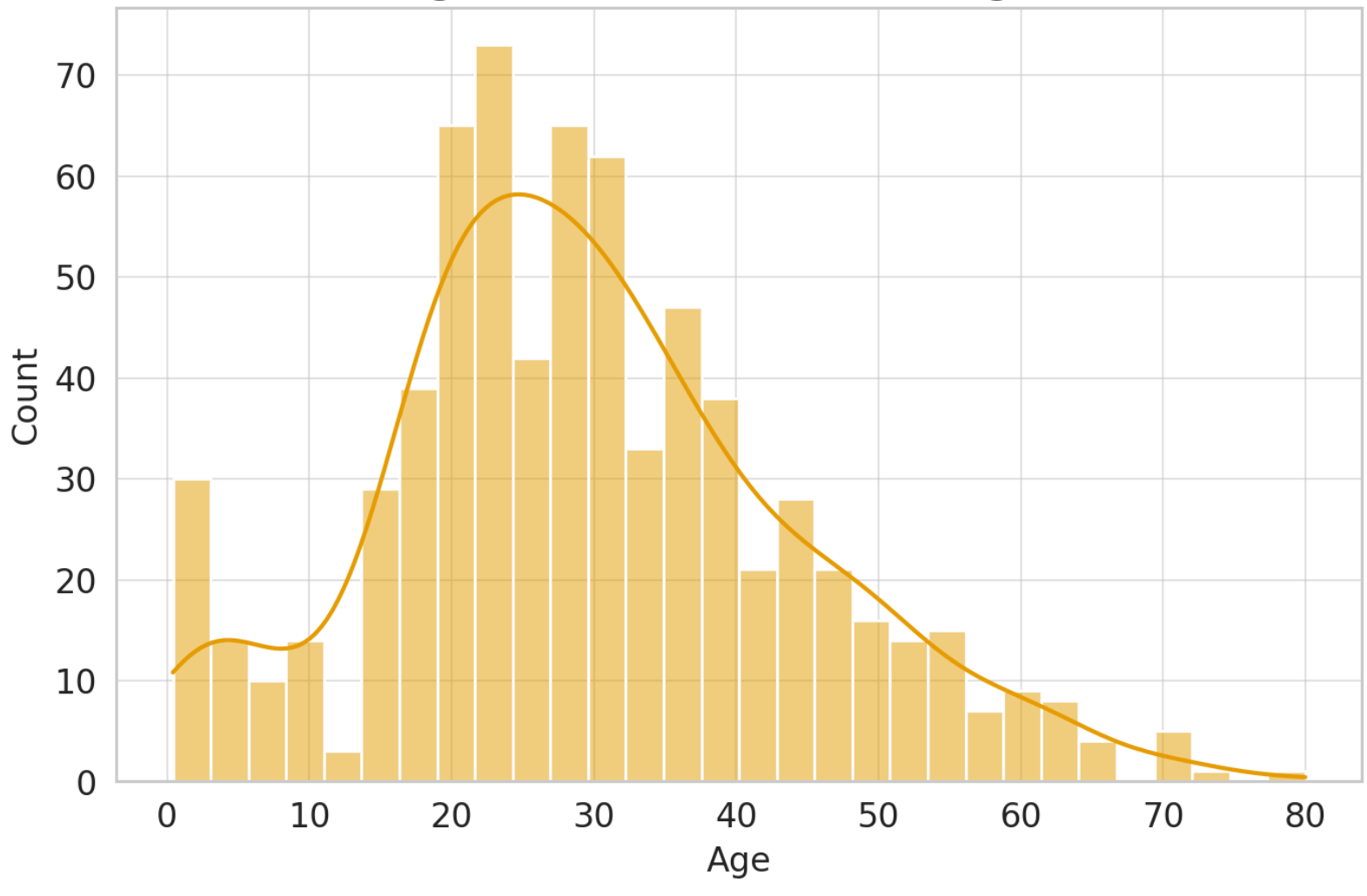
Passenger Class vs Survival



Observation: 1st class passengers survived more than 2nd and 3rd class.

Age Distribution

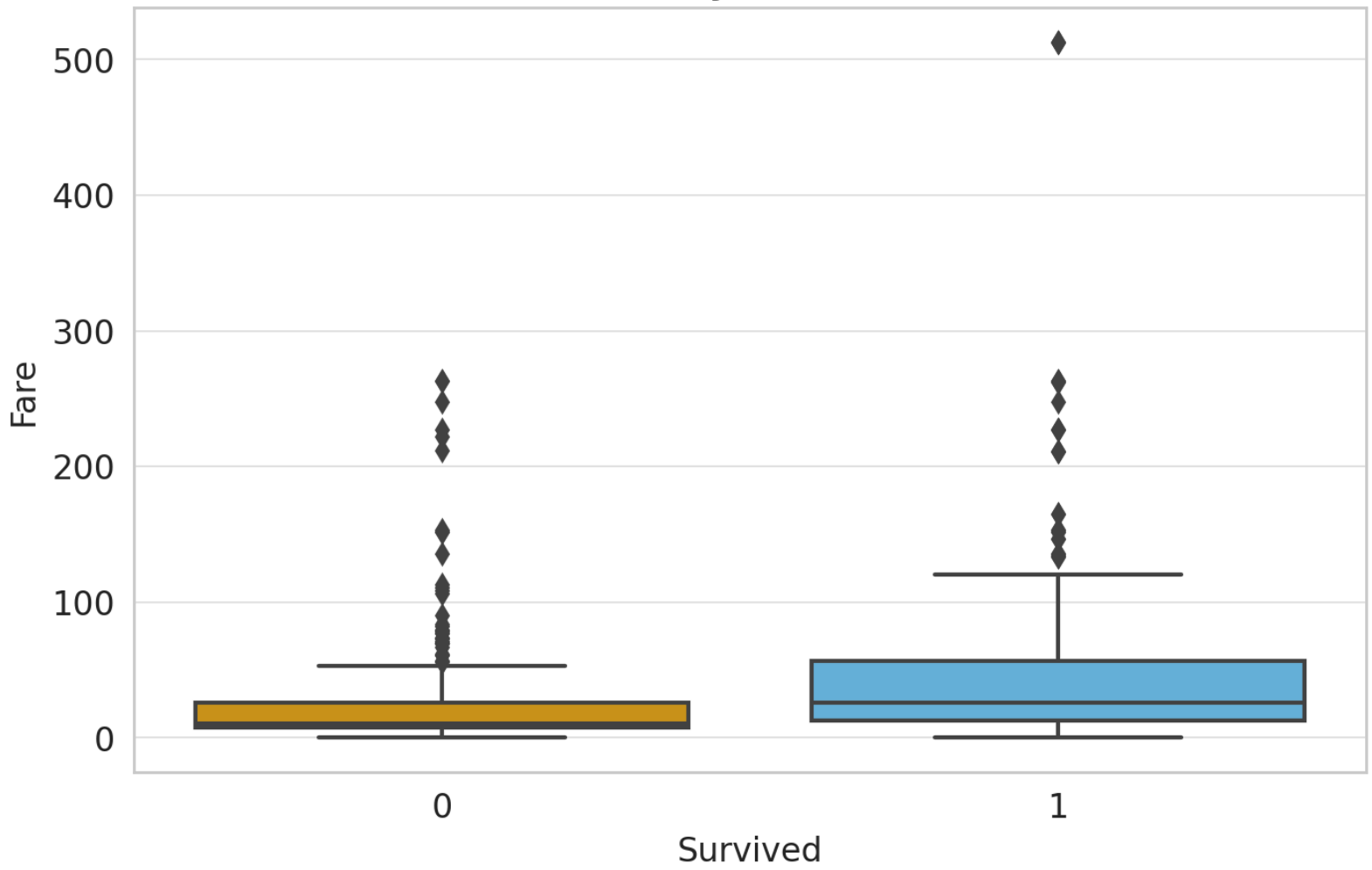
Age Distribution of Passengers



Observation: Most passengers were aged between 20 and 40. Children showed somewhat higher survival rates.

Fare vs Survival (boxplot)

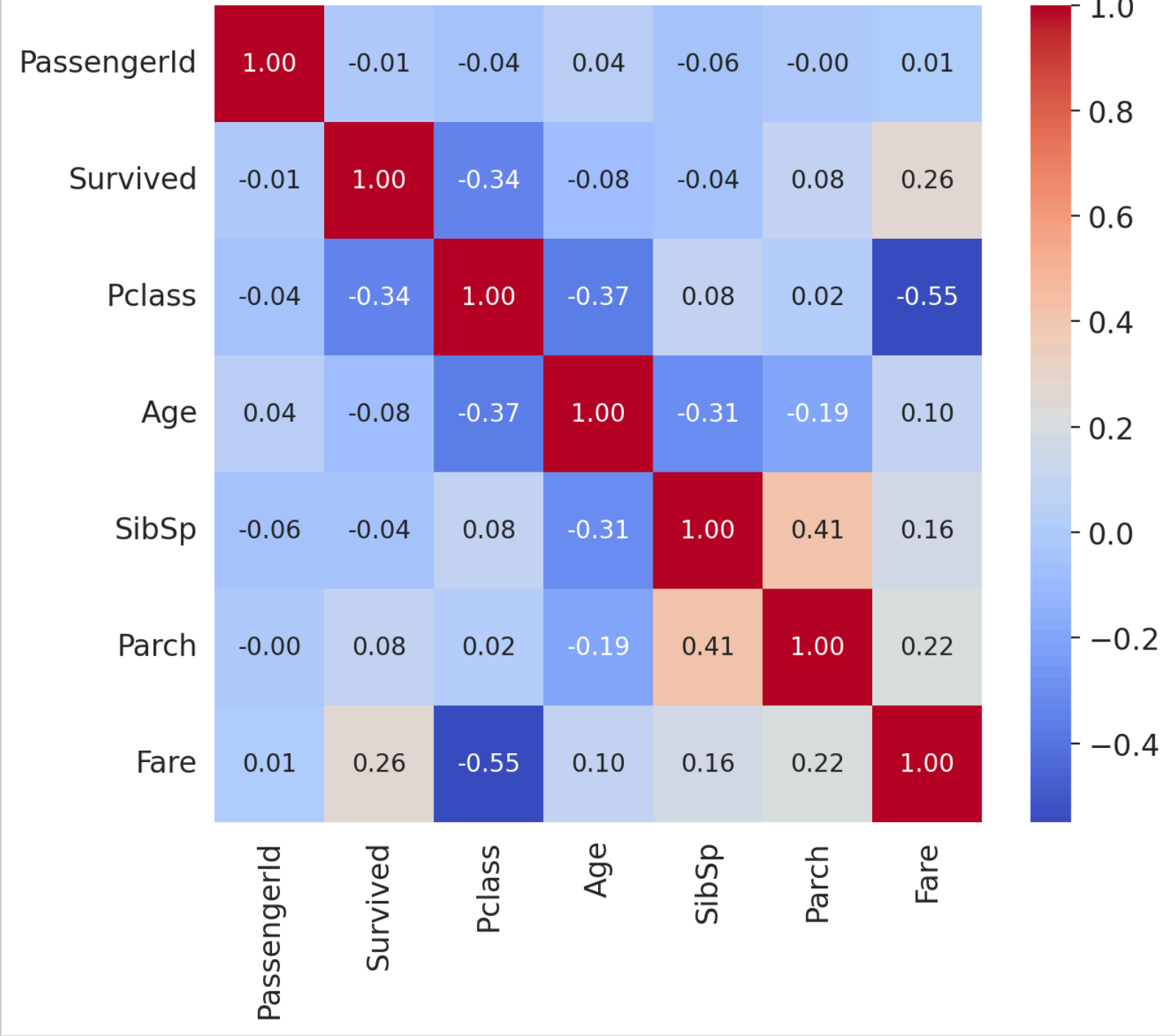
Fare by Survival



Observation: Passengers who paid higher fares tended to have higher survival.

Correlation Heatmap

Correlation Heatmap (numeric)



Observation: Shows relationships between numeric features (e.g., Pclass and Fare).

Survival % by Pclass and Sex

| | Survived | 0 | 1 |
|--------|----------|-------|-------|
| Pclass | Sex | | |
| 1 | female | 3.19 | 96.81 |
| | male | 63.11 | 36.89 |
| 2 | female | 7.89 | 92.11 |
| | male | 84.26 | 15.74 |
| 3 | female | 50.00 | 50.00 |
| | male | 86.46 | 13.54 |

How to use these files

1. Open the included Jupyter notebook (titanic_eda.ipynb) in Jupyter and Run All cells to reproduce the analysis.
2. Open this HTML file in your browser and Print → Save as PDF to get a PDF report.

Prepared automatically by assistant.