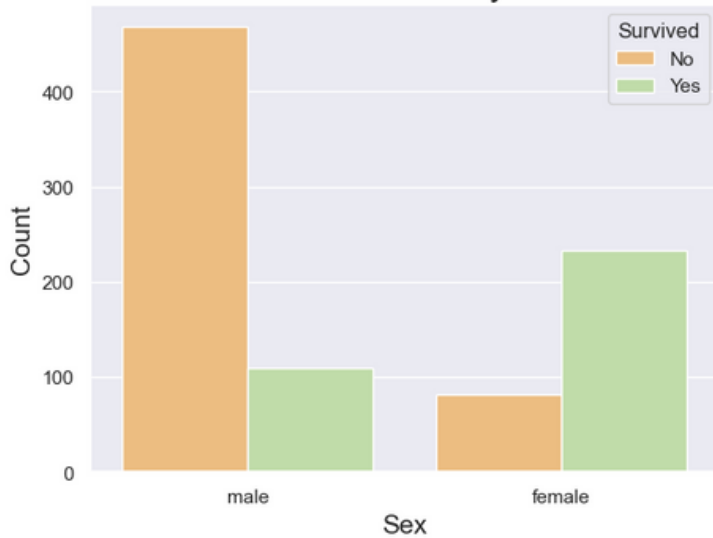


# How to survive the Titanic disaster?

**Hypothesis:** The key factors deciding the survival of the Titanic disaster were **Sex, Age, Passenger Class, and Travelling Alone or With Family**.

Survival Count by Sex



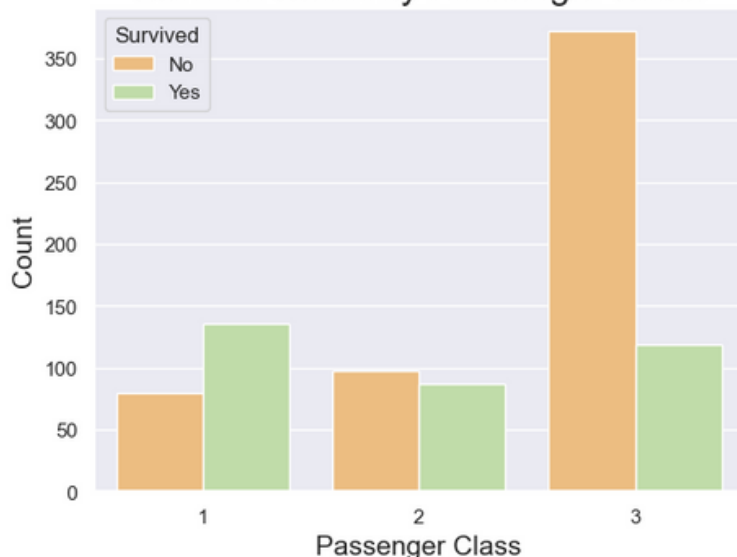
This bar plot compares the number of male and female passengers who survived or did not survive. Females had a significantly higher survival rate compared to males, indicating that sex was a strong factor in survival outcomes.

Age Distribution of Survivors vs Non-Survivors



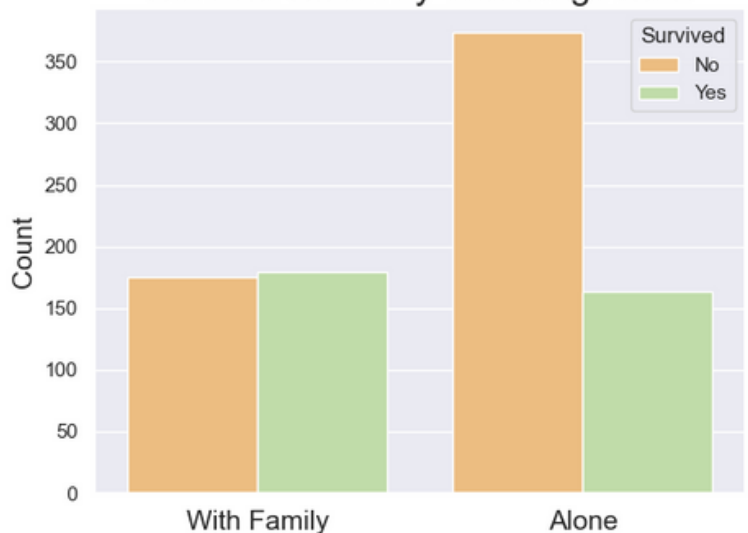
This density plot shows the age distribution for passengers who survived and those who did not. Children (younger ages) had a higher survival rate, while the majority of non-survivors were adults, particularly in the 20–40 age range.

Survival Count by Passenger Class



The bar plot displays survival counts across different passenger classes (1st, 2nd, 3rd). Survival rates were highest for 1st-class passengers and lowest for 3rd-class, suggesting a strong correlation between socioeconomic status (class) and survival.

Survival Count by Traveling Alone



This plot compares survival counts for passengers traveling alone versus those with family. Passengers traveling with family had a slightly higher survival rate, indicating that family presence may have influenced survival chances.

**The data strongly supports the hypothesis that survival on the Titanic was influenced by gender bias, age prioritization, class privilege, and family ties, reflecting societal norms and structural inequalities during the disaster.**