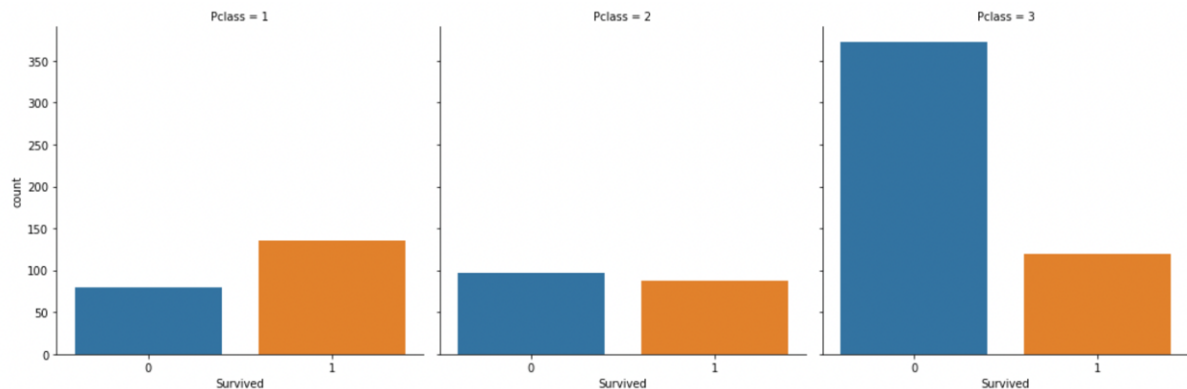


Assignment 3 - Titanic Exploratory Data Analysis

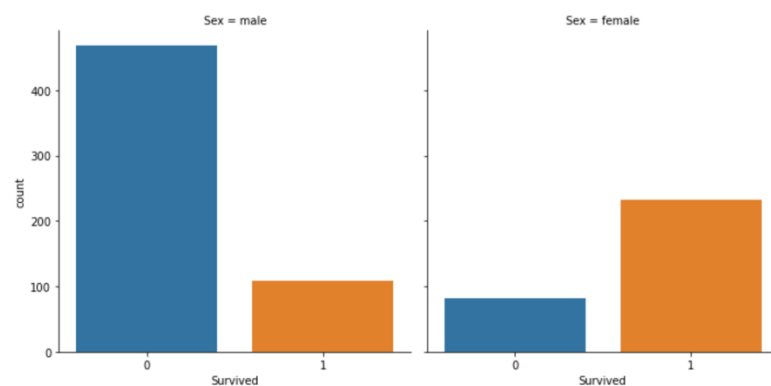
We were provided the "Titanic" dataset to do exploratory data analysis and address three hypotheses based on the dataset in order to investigate the correlations among the variables assumed in the hypothesis. The following is a synopsis of the hypothesis that was tested:

- **Determine if the survival rate is associated to the class of passenger**



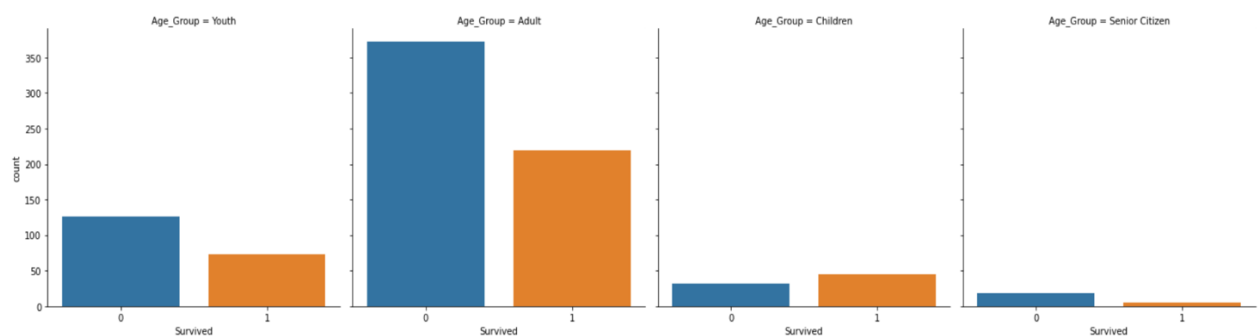
The figure shows that there is a correlation between the number of passengers who survive and the class of passengers, with "Class 1" passengers surviving more than "Class 2" and "Class 3" passengers.

- **Determine if the survival rate is associated to the gender**



The statistic illustrates that there is a link between the number of passengers who survived and their gender, as "Female" passengers survive in greater numbers than "Male" passengers.

- **Determine if the survival rate is associated to the age**



To test this theory, we divided the passengers into four groups depending on their ages: "Children", "Youth," "Adult," and "Senior Citizen." According to this, "Children" has the highest rate of survival, followed by "Adult", then "Youth" and finally "Senior Citizen."