Titanic Dataset Visualization.
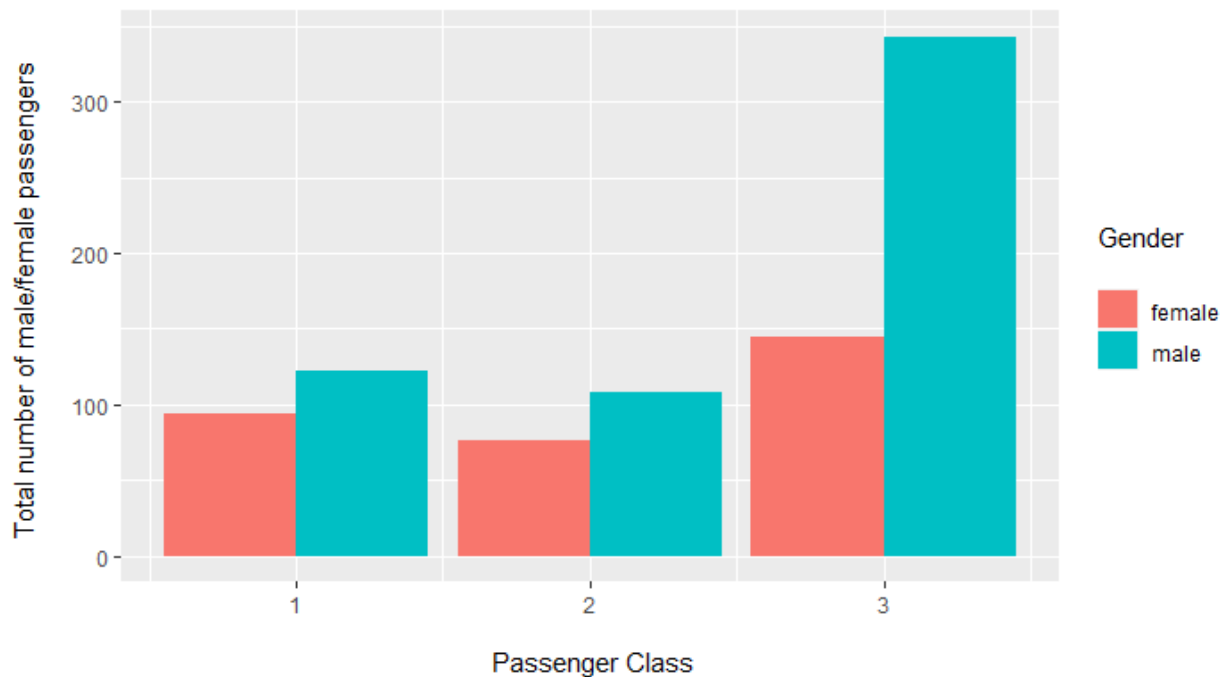
I am using six graphs to visualize this data. They are as follows:
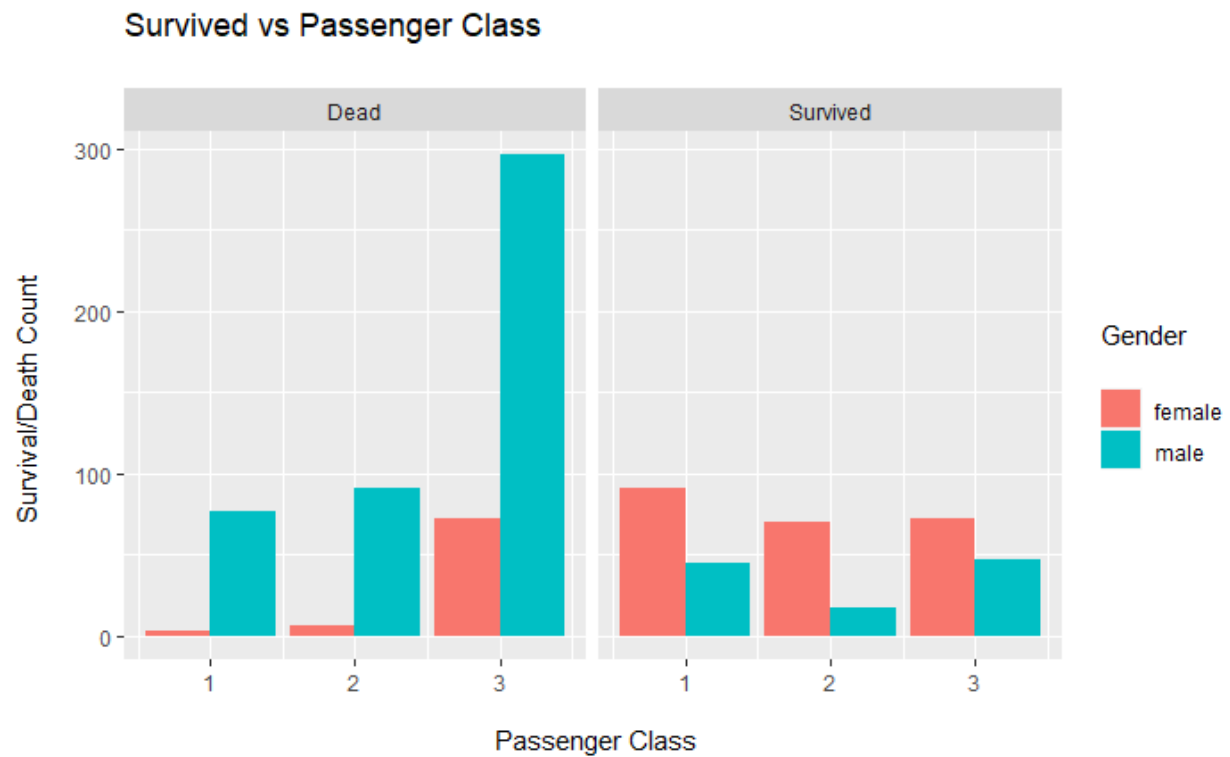
1. **Bar Graph for Gender VS Passenger Class and Survived VS Passenger Class:**
- A bar chart is a graph with rectangular bars.
- The graph usually compares different categories.
- This graph is an ideal fit to compare passenger count that survived based on gender and passenger class.
- Using Bar graphs for Gender VS Passenger Class and Survived VS Passenger Class, I wanted to compare the total count of male/female passengers in each passenger class to the total count of male/female passengers that survived from each passenger class.
- The below bar graph provides the exact number of male/female passengers present in each passenger class.

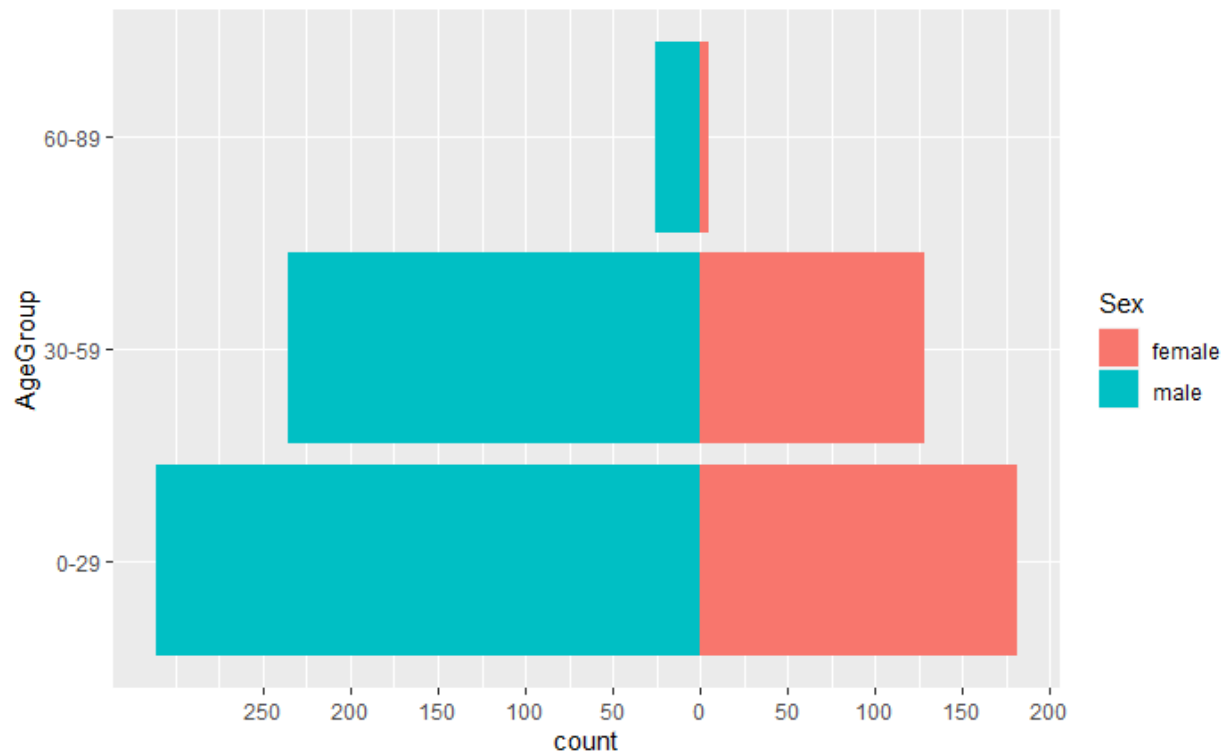- The below graph shows the total count of male/female passengers that survived from each passenger class.

Survived vs Passenger Class

- Considering the above graphs, we can conclude that most female passengers traveling in Passenger Class 1 have survived.
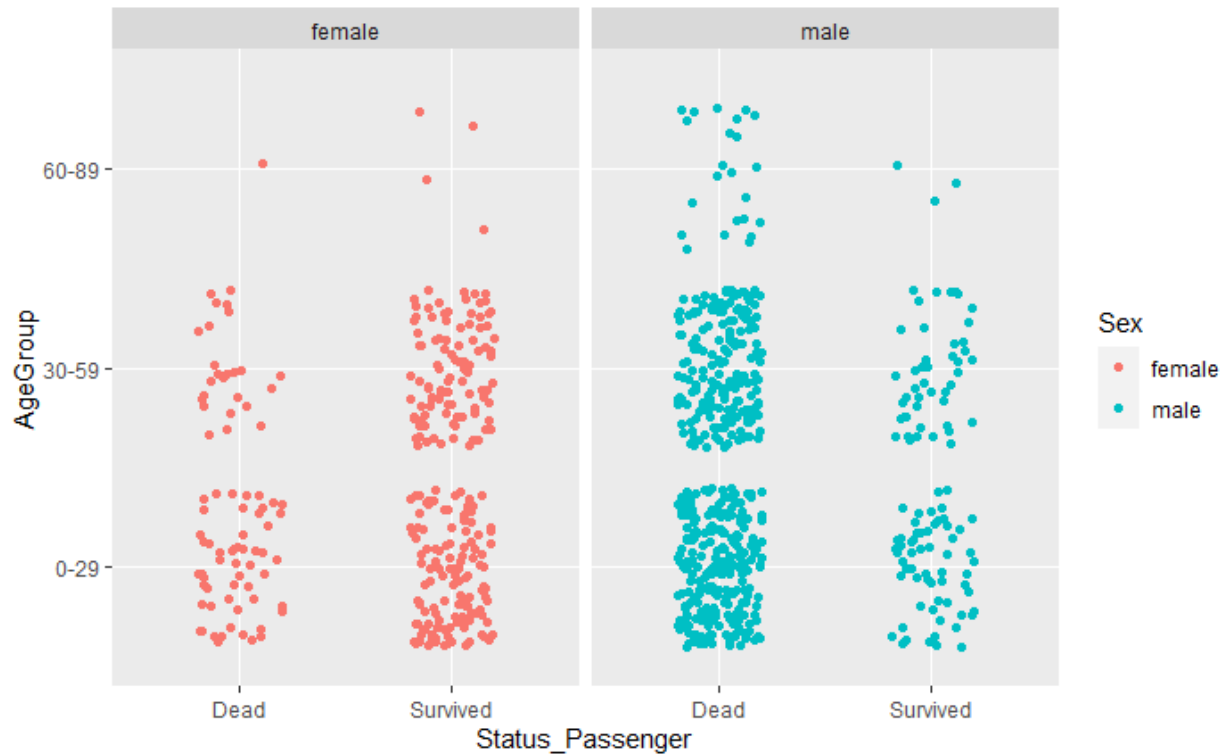
2. Diverging Bar Chart for Total Male/Female Passengers VS AgeGroup:
- To create this chart, I made one extra column for AgeGroup.
- The Diverging bar chart can be handy for comparing values.
- This chart shows the total number of male/female passengers for a particular age group.
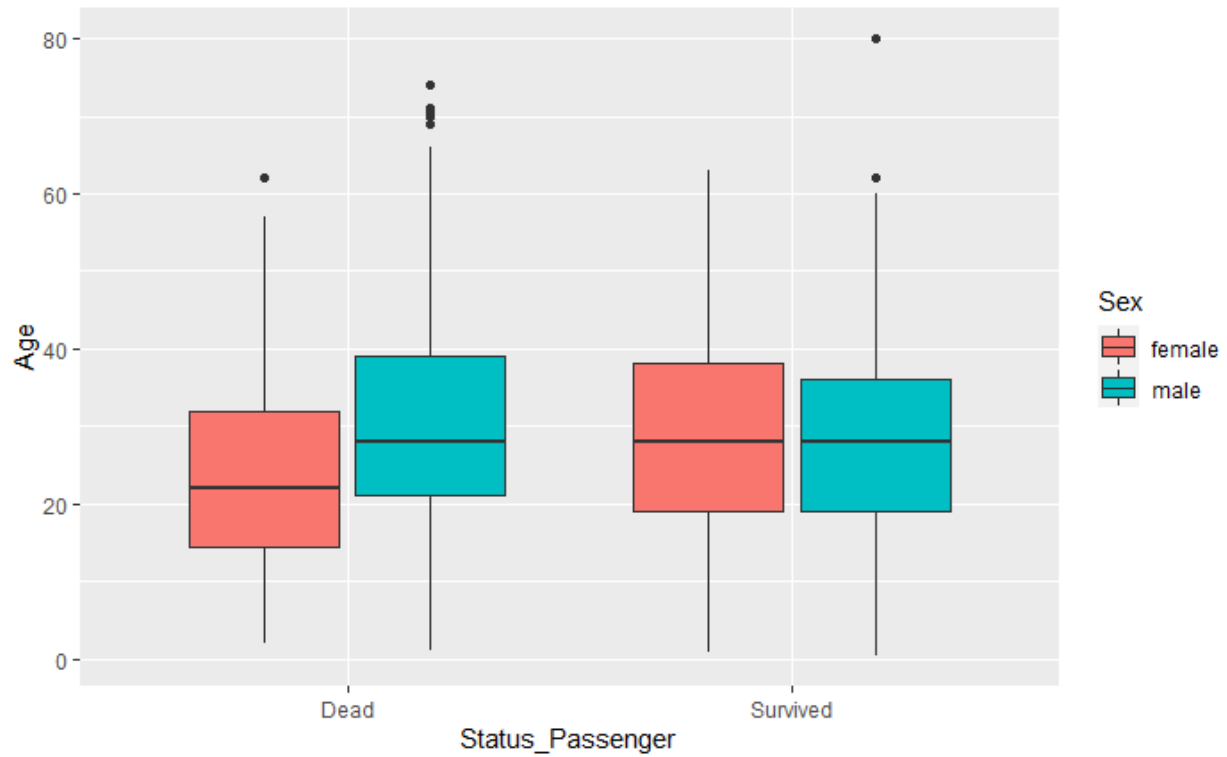
3. Jitter graph for Total number of male/female survivors vs AgeGroup:

- This chart shows us the total number of male/female survivors for a particular age group.
- By the density of points, one can easily find out where the majority of data is located.
- It can be seen that most of the female passengers between the age group of 0-29 survived.
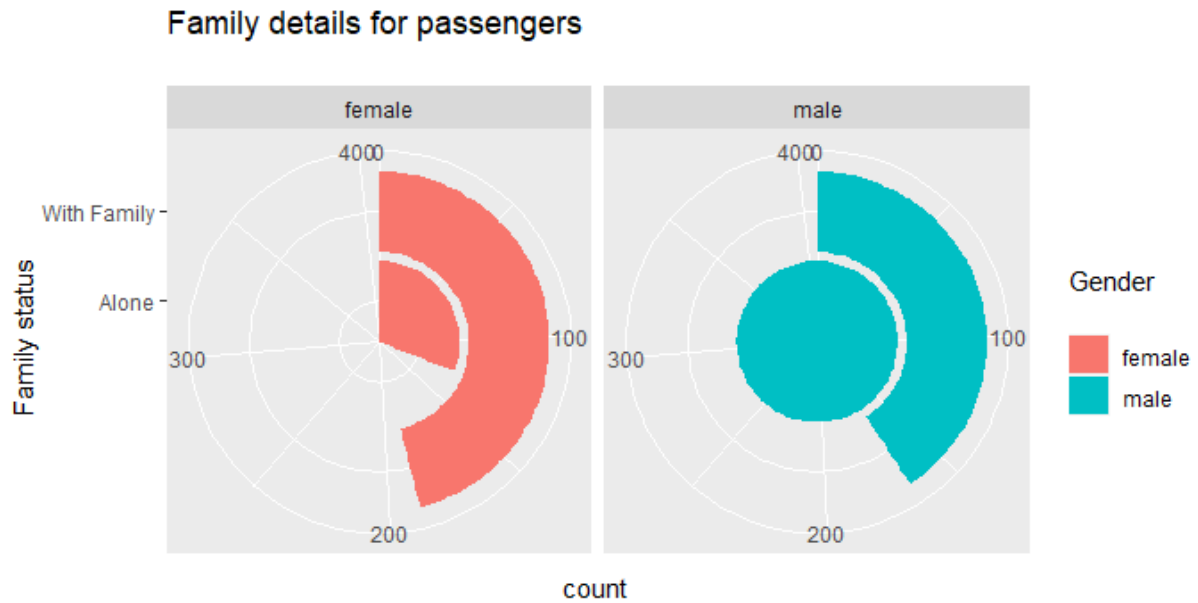
4. Box Plot for Total number of male/female survivors VS AgeGroup:

- A box plot can be an alternative to know the average age of people that survived.
- The graph tells us that the average age of female passengers that survived was between 20 – 30.
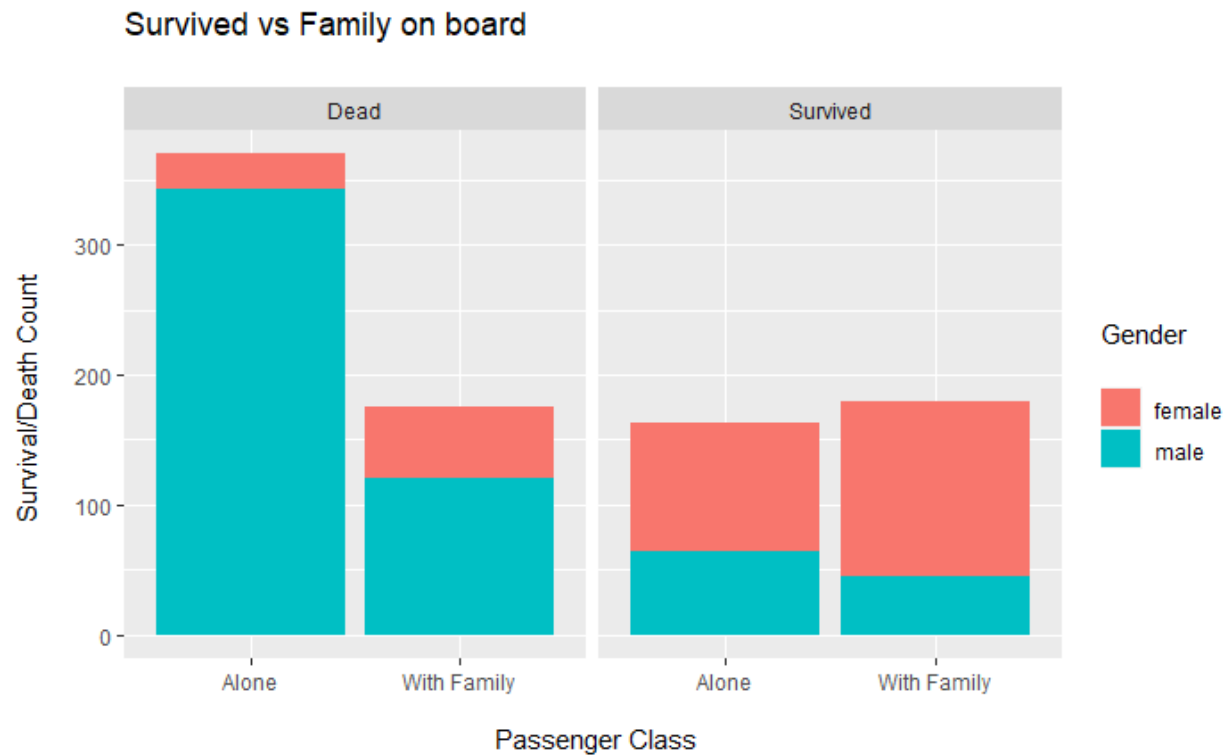
5. Pie Chart for Family on board/Traveling alone vs Gender:

- This chart shows the number of male/female passengers traveling with/without family.
- This graph is not an ideal fit for this scenario as we don't get a clear picture of the count.
- It can be seen that many female passengers are traveling with family.

Family details for passengers

6. **Stacked Bar chart for Survived VS Family on Board:**
- This graph tells us the survival rate of male/female passengers based on their family on board.
- It can be seen that the majority of women traveling with family have survived.

Survived vs Family on board

Finally, considering all the graphs, we can conclude that **"Female passengers between the age group of 0-29, traveling with family have the highest rate of survival".**