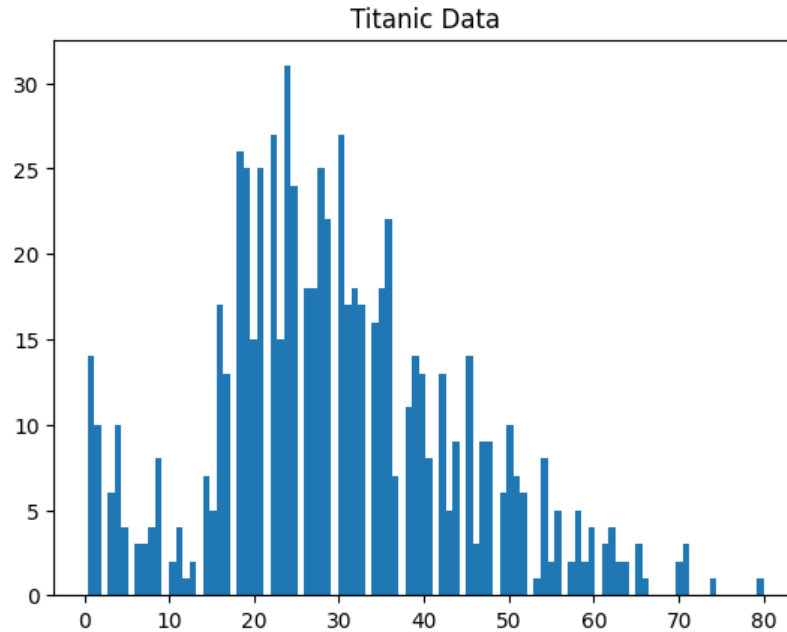


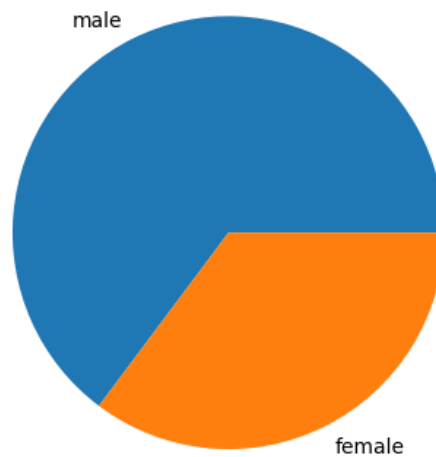
Titanic Data Analysis

Through the use of coding in python a data set of titanic passenger data was analyzed to find relationships between different data points to better understand things such as what contributed to some individuals surviving, the gender and age distribution and more.

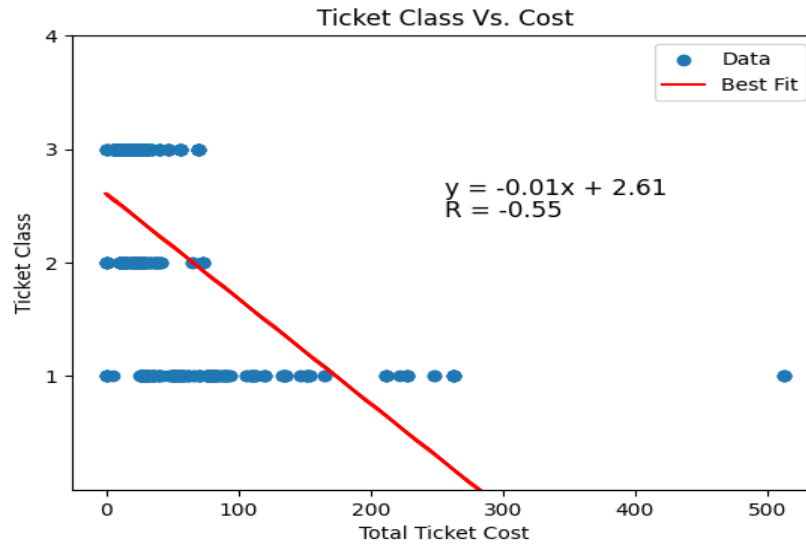


The data indicates that there was a large age distribution with the average passenger being in between 18 and 35 years of age.

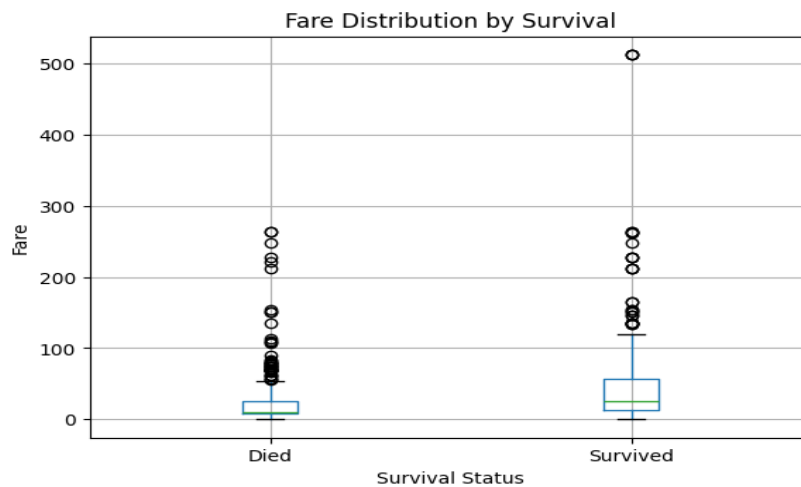
Gender Distribution of The Titanic



The Titanic had a gender distribution that showed that there were more males than females onboard.



The graph above derive information from the amount of fare that a passenger spent, showing that if a passenger spent a larger amount of money they received a higher class ticket.



Keeping with data analysis of passenger fares, the survival likelihood can be analyzed and illustrated in the box and whisker plot above showing that passengers who spent more money for their tickets had a more likely probability of survival.

Survived	Died	Survived
Sex		
female	81	233
male	468	109

With a contingency table two different forms of categorical data can be analyzed. Above the genders of the passengers was compared to whether they survived or not. Females were fare more likely to survive than male passengers. A Chi-Squared test was performed and found to have a p-value of 1.2×10^{-58} indicating that there was a strong correlation between gender and the likelihood of survival.