# Exploratory Data Analysis - Summary of Findings

1. Age Distribution:

- The age of passengers is mostly concentrated between 20 to 40 years.

- There are fewer passengers in the younger (0-10) and older (60+) age groups.

- The distribution is fairly normal with a slight left skew due to a few older passengers.


2. Fare Distribution:

- Fare is right-skewed, with most passengers paying between 0 and 50.

- A small number of passengers paid very high fares, often those in first class.


3. Correlation Heatmap:

- 'SibSp' and 'Parch' have a strong positive correlation, indicating families often traveled together.

- 'Fare' and 'Pclass' show a moderate negative correlation - higher class passengers paid more.

- 'Age' does not show strong correlation with other features.


4. Pairplot Observations:

- Clear visual separation in Fare by Pclass.

- Slight clusters visible based on class and fare values.

- Pairplot helps identify potential groupings and trends in the data.


5. General Observations:

- Majority of the passengers belonged to 3rd class.

- Male passengers were more frequent than female passengers.

- Embarkation point 'S' had the highest number of passengers.

These insights can guide further analysis and model-building steps.