Summary of findings -

1. Heatmap Results

- A correlation matrix was generated from numeric columns in the Titanic data.

- Excluding non-numeric values (e.g., names), we were able to plot correlations between numeric variables such as "Age" and "Fare."

- Important insights: Heatmaps are used to identify variable relationships (e.g., correlation between age and fare).

2. Pairplot Correction

- The `sns.pairplot()` function is for pair relationships and does not accept the `annot` keyword argument.

- Pairplots graphically investigate relationships using scatterplots and histograms but do not have annotations such as those in heatmaps.

3. Scatter Plot Insights

- A scatter plot was created with "Age" and "Fare" from the Titanic data.

- Trends observed: Scatter plots give a clear visual comparison of how one numeric variable (e.g., fare paid) varies with respect to another (e.g., passenger age).

- The plot was successfully exported as an image file called "Titanic_Scatter_Plot.png."

Overall Observations

- Numeric variables are required for correlation and visual inspection.

  - Proper column selection guarantees insightful visualizations.

  - Every type of visualization (heatmap, pairplot, scatter plot) serves different purposes—correlation, pairwise exploration, and comparison in one direction, respectively.

This pipeline offers useful methods for dataset exploration and insight generation.