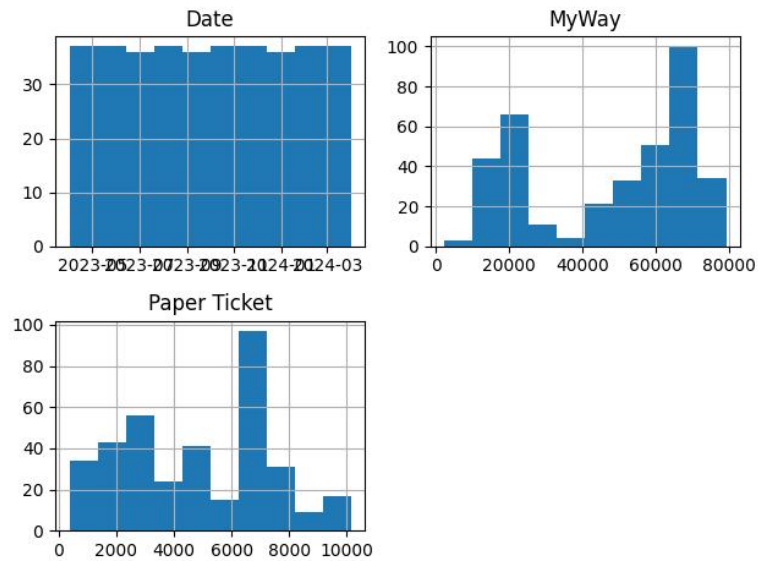
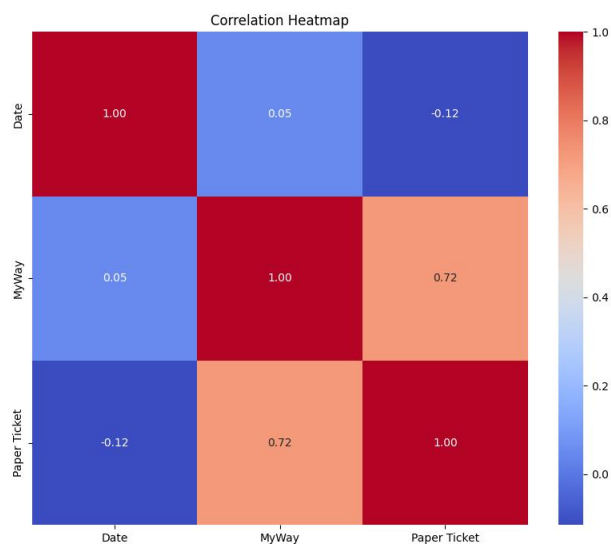


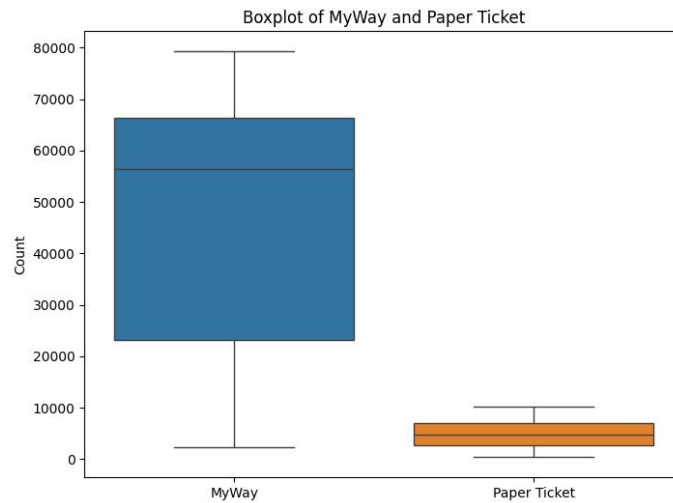
TASK - 1



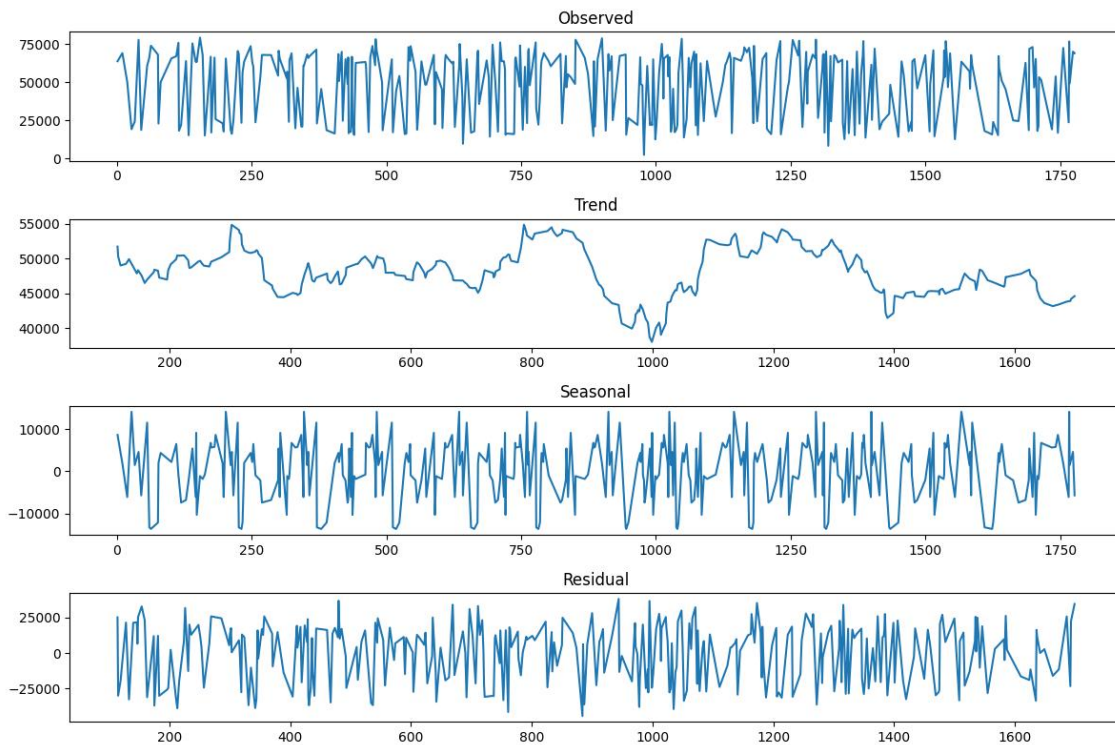
- Ticket sales seem to be on an upward trend



The heatmap shows that the number of paper tickets purchased (Paper Ticket) has a strong positive correlation with the date (Date) at 0.8.



The cost of MyWay is generally higher than the cost of paper tickets. The center line (median) for MyWay is positioned higher than the center line for paper tickets.



Trends: The observed data graph shows a possible upward trend over time. There is an increase in values from left to right.

Seasonality: The seasonal data graph shows a cyclical pattern. There might be a seasonal component affecting the observed data.

Residuals: The residuals graph seems to fluctuate around a zero line.

TASK - 2

Split the dataset into training and testing sets using a 80-20 split ratio.

Trained a Linear Regression model using the training data.

The predicted "MyWay" values for the next 7 days are as follows:

2024-05-01: Predicted MyWay value = 78559.71

2024-05-02: Predicted MyWay value = 62809.68

2024-05-03: Predicted MyWay value = 47059.65

2024-05-04: Predicted MyWay value = 31309.61

2024-05-05: Predicted MyWay value = 15559.58

2024-05-06: Predicted MyWay value = 78614.52

2024-05-07: Predicted MyWay value = 62864.48