Final Assignment: Part2 -Create Dashboard with Plotly and Dash

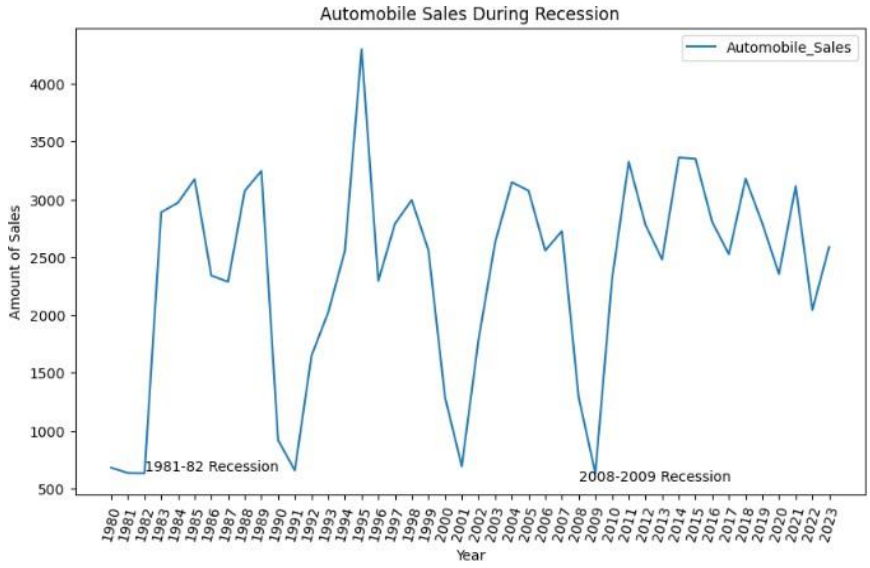
This file only contains the images from Dash uploaded for the final exam.

Submitted by Jeya Prakash I on April 10, 2025

Task1.1

Develop a Line Plot using the functionality of Pandas to show how auto mobile sales fluctuate from year to year.

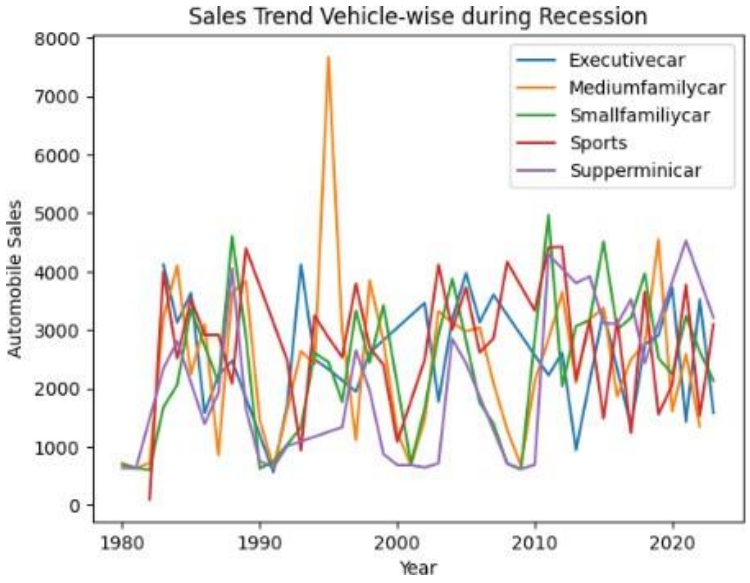
Submit the image *Line_Plot_1.png*



Task1.2

Plot different lines for categories of vehicle type and analyze the trend to answer the question, "Is there noticeable difference in sales trends between different vehicle types during recession periods?"

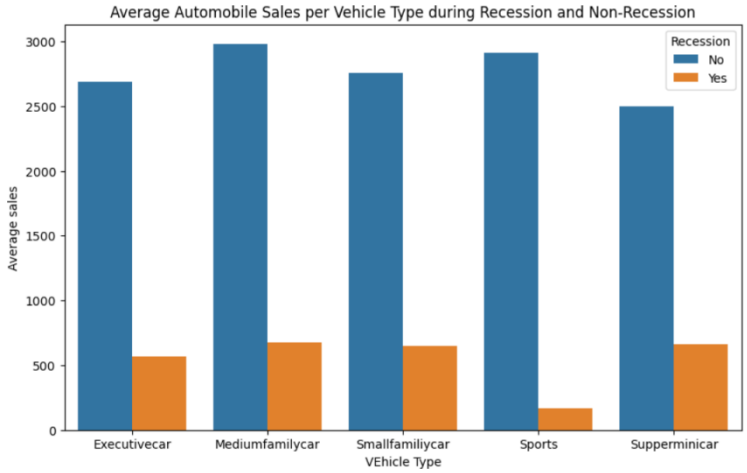
Submit the image *Line_Plot_2.png*



Task1.3

Use the functionality of Seaborn Library to create a visualization to compare the sales trend per vehicle type for a recession period with a non-recession period.

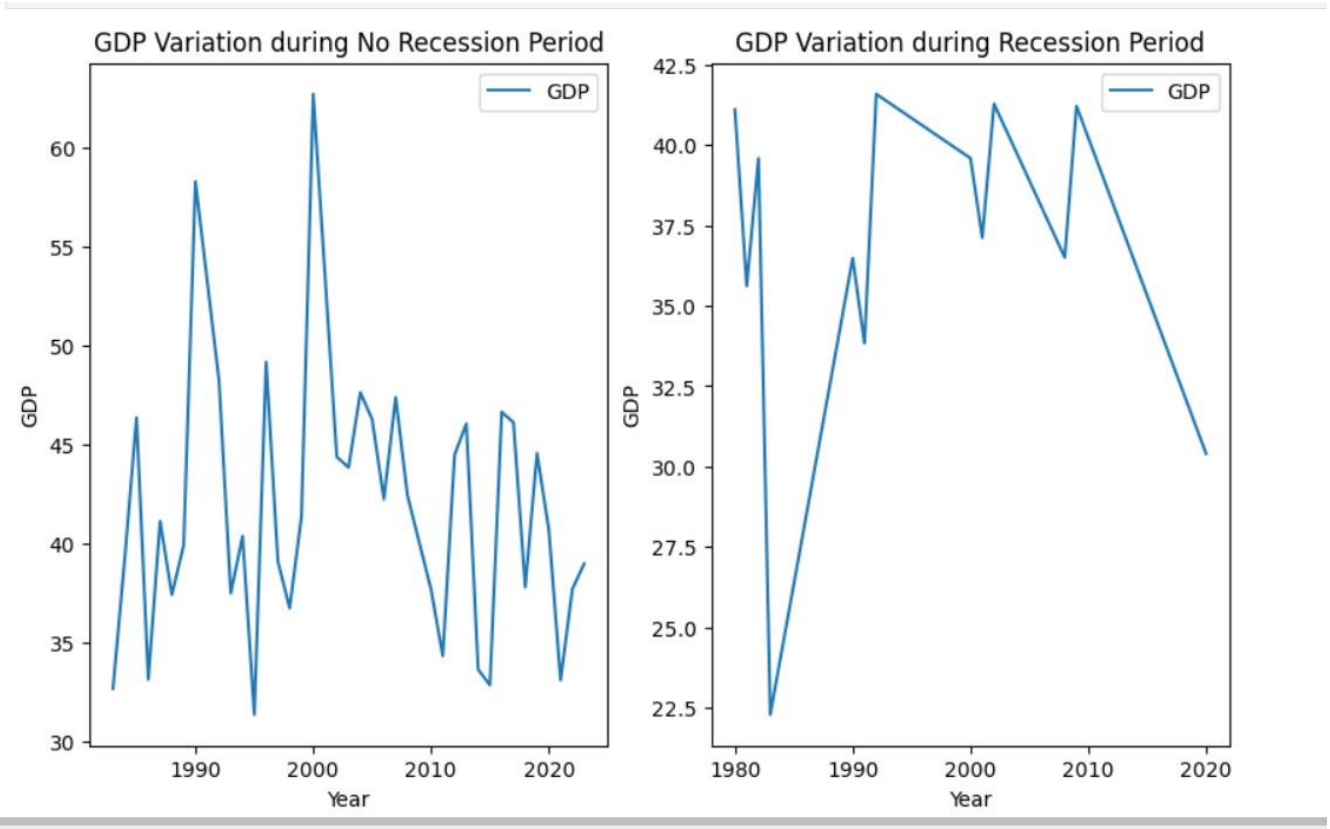
Submit the image *Bar_Chart.png*



Task1.4

Use sub plotting to compare the variations of GDP during recession and non-recession period by developing line plots for each period.

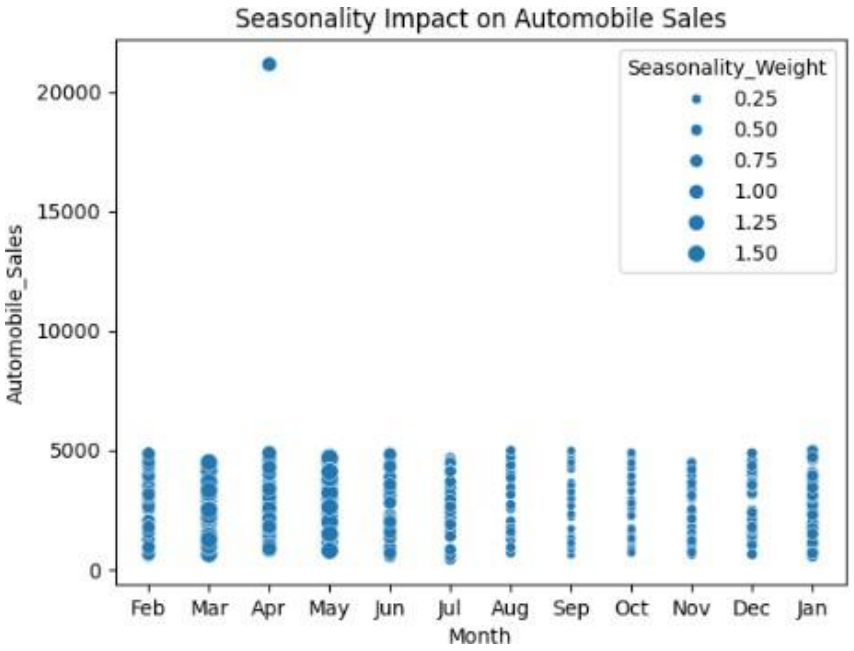
Submit the image *Subplot.png*



Task1.5

Develop a Bubble Plot for displaying the impact of seasonality on Auto mobile Sales.

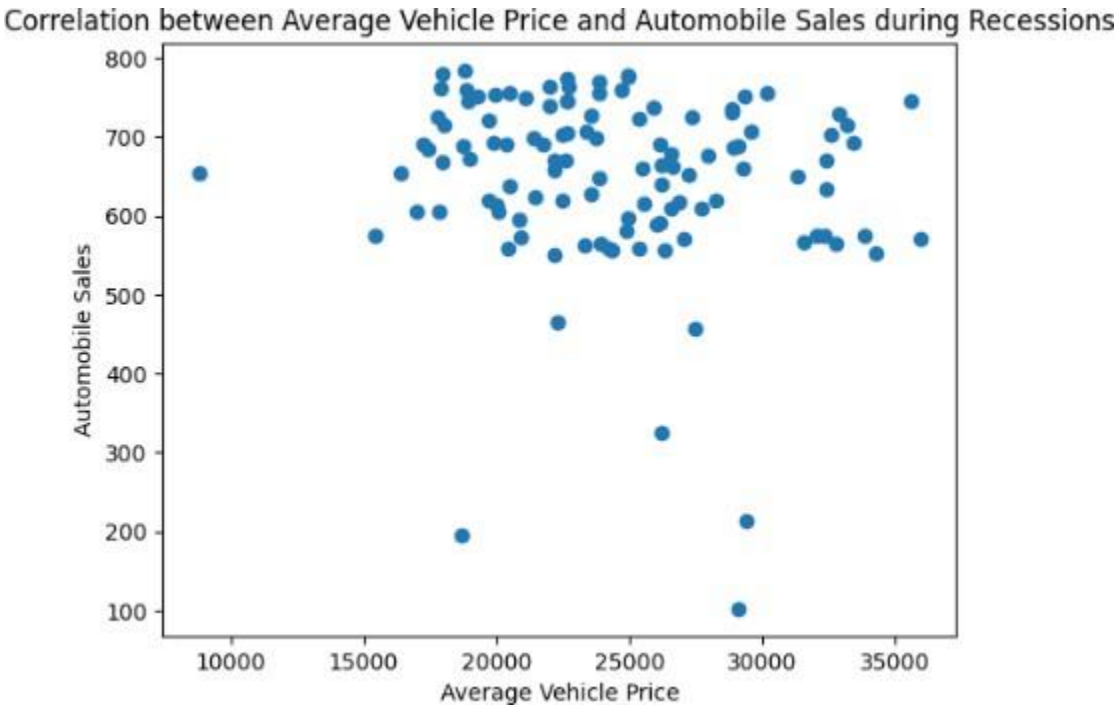
Submit the image *Bubble.png*



Task1.6

Use the functionality of Matplotlib to develop a Scatter Plot to identify the correlation between average vehicle price related to the sales volume during recessions.

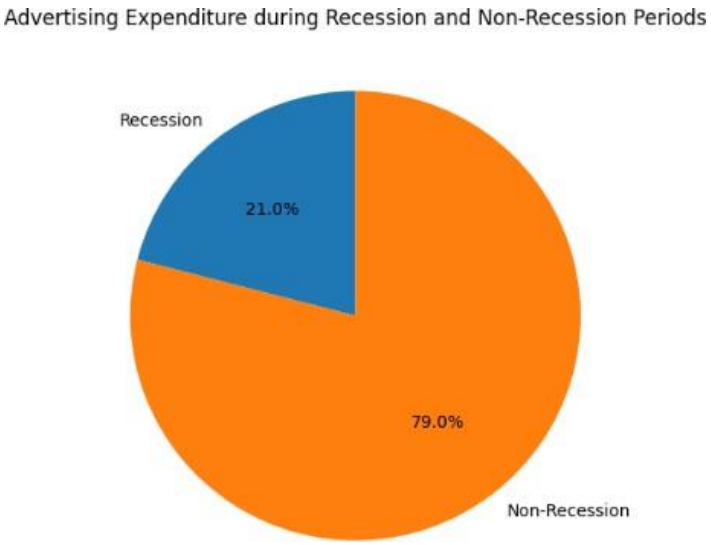
Submit the image *Scatter.png*



Task1.7

Create a Pie Chart to display the portion of advertising expenditure of XYZ Automotives during recession and non-recession periods.

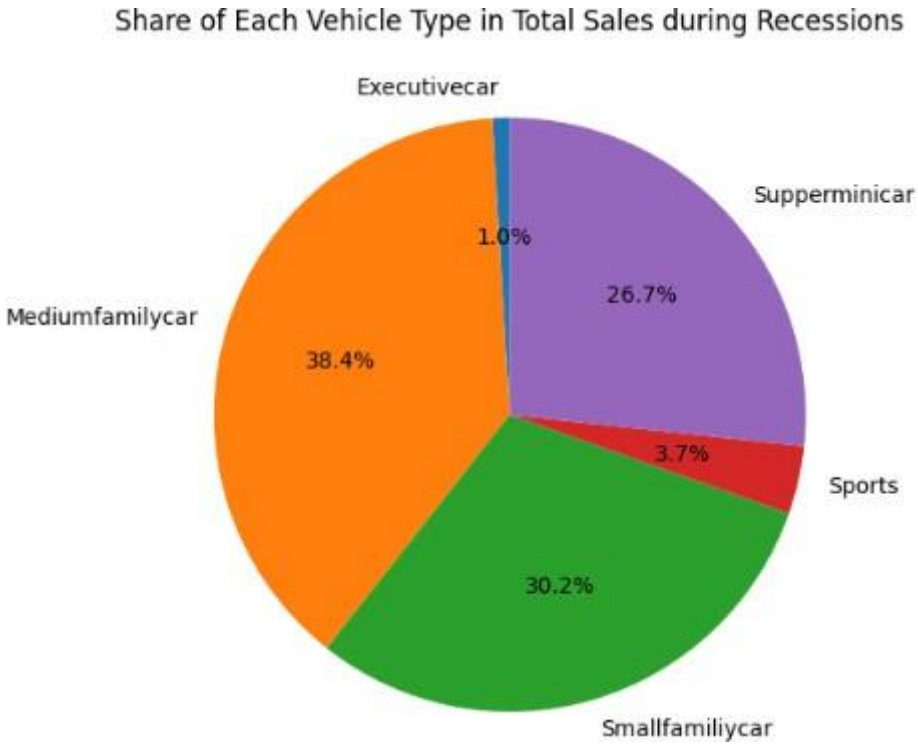
Submit the image *Pie_1.png*



Task1.8

Develop a Pie Chart to display the total advertising expenditure for each vehicle type during recession period.

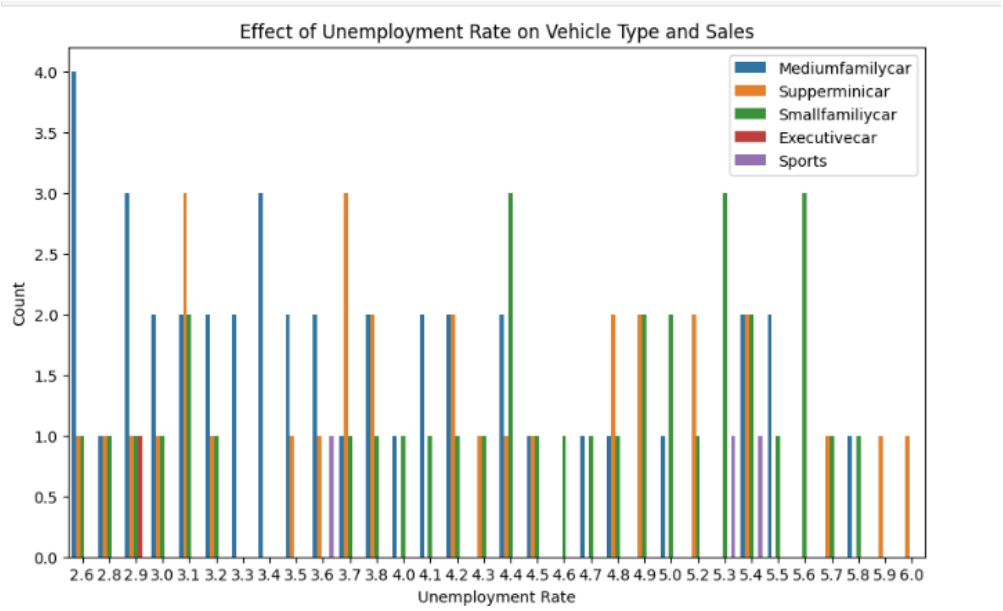
Submit the image *Pie_2.png*



Task1.9

Develop a Line Plot to analyze the effect of the unemployment rate on vehicle type and sales during the recession period.

Submit image *Line_Plot_3.png*



Task2.1

Create a Dash application and give it a meaningful title.

Submit the image *Title.png*

Task2.2

Add drop-downs to your dash board with appropriate titles and options.

Submit the image *Dropdown.png*

Task2.3

Add a division for output display with appropriate ‘id’ and ‘classname’ properties.

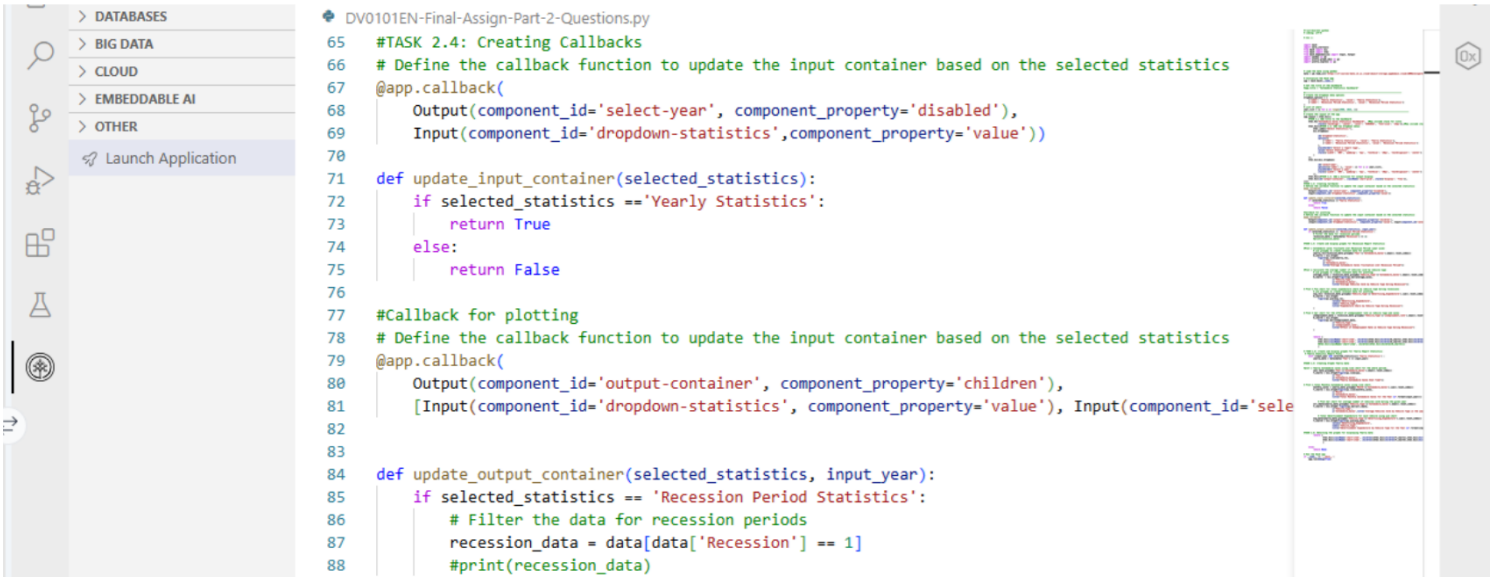
Submit the image *Outputdiv.png*

```
62      html.Div([#TASK 2.3: Add a division for output display
63      html.Div(id='output-container', className='chart-grid', style={'display': 'flex'}),
64  ])])
```

Task2.4

Creating Callbacks: Define the callback function to update the input container based on the selected statistics and the output container.

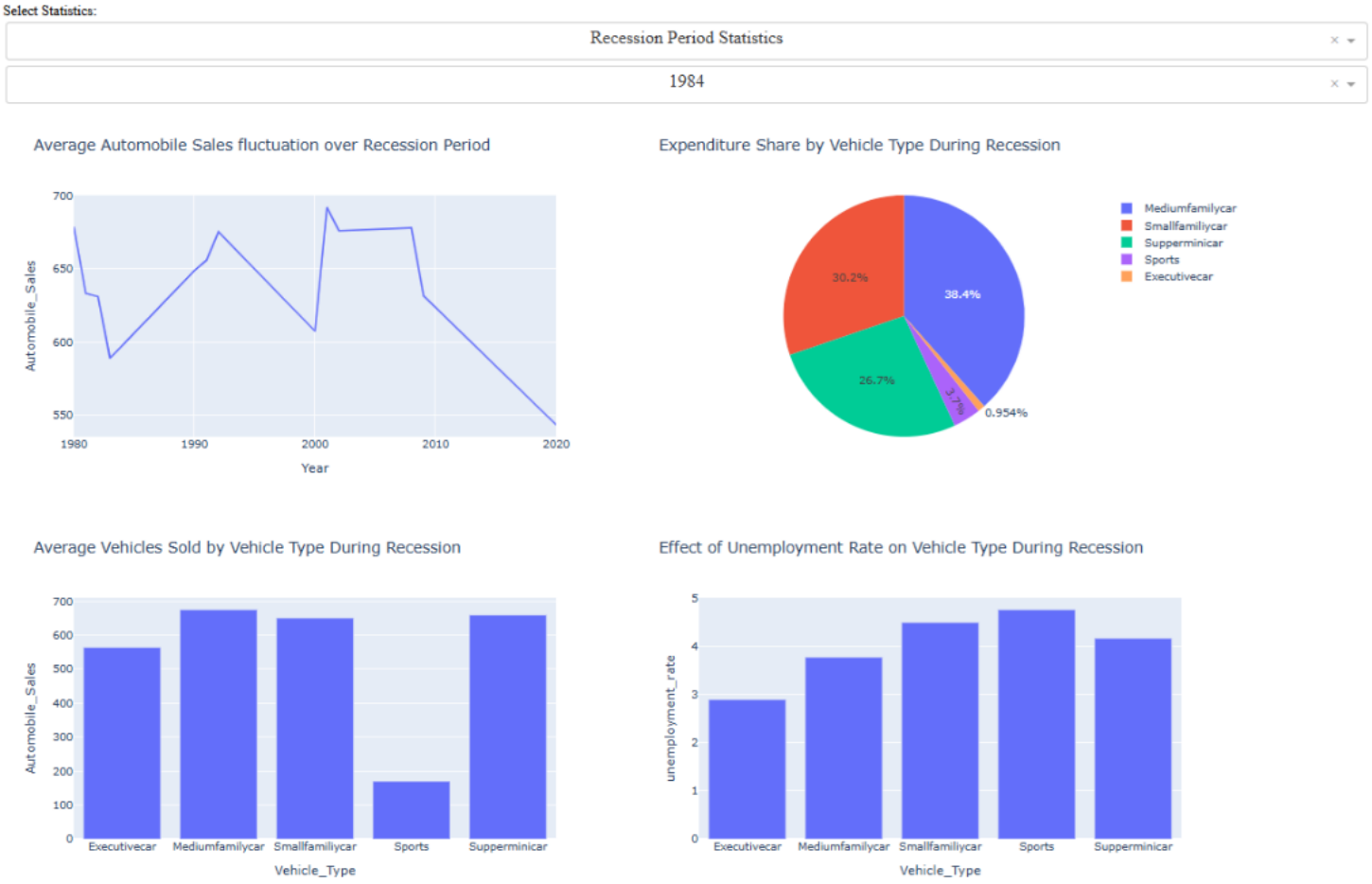
Submit the *Callbacks.png*



Task2.5

Create and display graphs for Recession Report Statistics.

Submit the image *Recession ReportGraphs.png*



Task2.6

Create and display graphs for Yearly Report Statistics.

Submit the image *YearlyReportGraphs.png* for the report types.