

## Results

### Q1 – Title image

# Automobile Sales Statistics Dashboard

### Q2 – Drop Down Lists

#### Select Report Type:

Which report would you like to display, yearly or recession?

Yearly Statistics X ▾

#### Year:

Which year would you like to display for the yearly report?

2005 X ▾

### Q3 – Output Divisions

```
58     ),
59     html.Div(
60     [
61         html.Label(
62             "Select Report Type:",
63             className="text-base font-semibold text-gray-900",
64             htmlFor="input-report",
65         ),
66         html.P(
67             "Which report would you like to display, yearly or recession?",
68             className="text-sm text-gray-500",
69         ),
70         dcc.Dropdown(
71             options=[
72                 {"label": "Yearly Statistics", "value": "Yearly"},
73                 {"label": "Recession Period Statistics", "value": "Recession"},
74             ],
75             value="Yearly",
76             id="input-report",
77         ),
78     ],
79     className="mt-4",
80 ),
81 html.Div(
82 [
83     html.Label(
84         "Year:",
85         className="text-base font-semibold text-gray-900",
86         htmlFor="input-year",
87     ),
88     html.P(
89         "Which year would you like to display for the yearly report?",
90         className="text-sm text-gray-500",
91     ),
92     dcc.Dropdown(
93         sorted(df.Year.unique()), value=2005, id="input-year", disabled=True
94     ),
95 ]
96 )
```



## Q4 – Callbacks

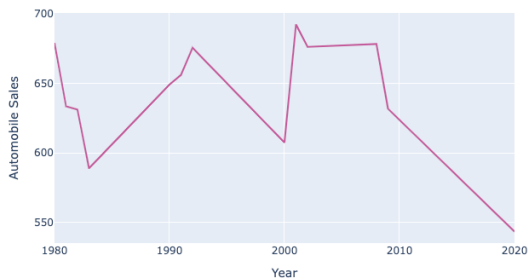
```

112 @callback(Output("input-year", "disabled"), Input("input-report", "value"))
113 def disable_year(report_value):
114     if report_value == "Recession":
115         return True
116     else:
117         return False
118
119
120 @callback(
121     [
122         Output(component_id="plot-1", component_property="figure"),
123         Output(component_id="plot-2", component_property="figure"),
124         Output(component_id="plot-3", component_property="figure"),
125         Output(component_id="plot-4", component_property="figure"),
126     ],
127     [
128         Input(component_id="input-report", component_property="value"),
129         Input(component_id="input-year", component_property="value"),
130     ],
131 )
132 def display_graphs(report_value, entered_year):
133     if report_value == "Recession":
134         return recession_graphs()
135     else:
136         return year_graphs(entered_year)
137

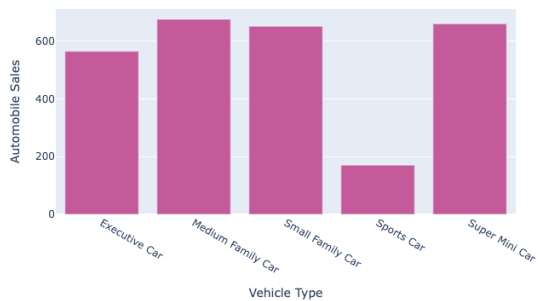
```

## Q5 – Recession Report graphs

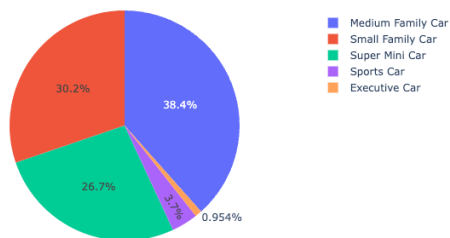
Average Automobile Sales by Year during Recession Periods



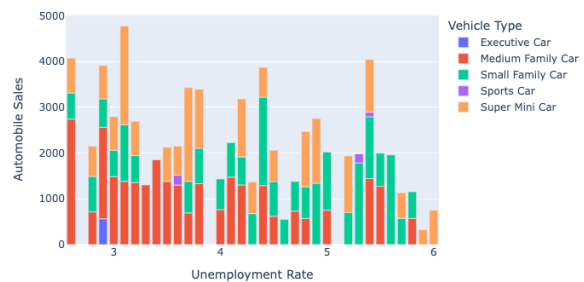
Average Automobile Sales by Vehicle Type during Recession Periods



Total Advertising Expenditure by Vehicle Type during Recession Periods

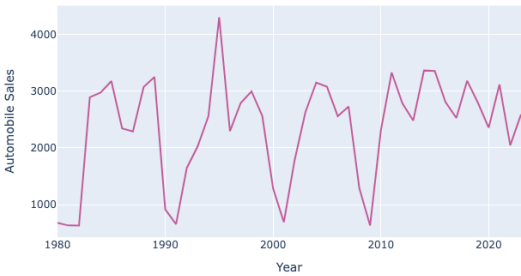


Automobile Sales by Vehicle Type Per Unemployment Rate during Recession P

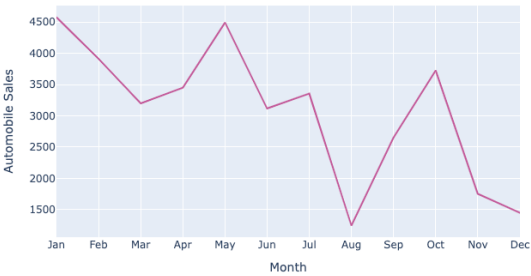


Q6 – Yearly Report graphs

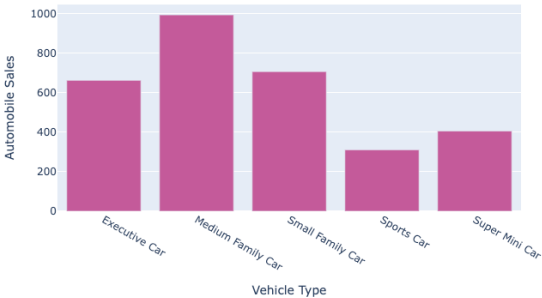
Yearly Average Automobile Sales



Total Automobile Sales per Month in 2005



Average Monthly Automobile Sales by Vehicle Type in 2005



Total Advertising Expenditure by Vehicle Type in 2005

