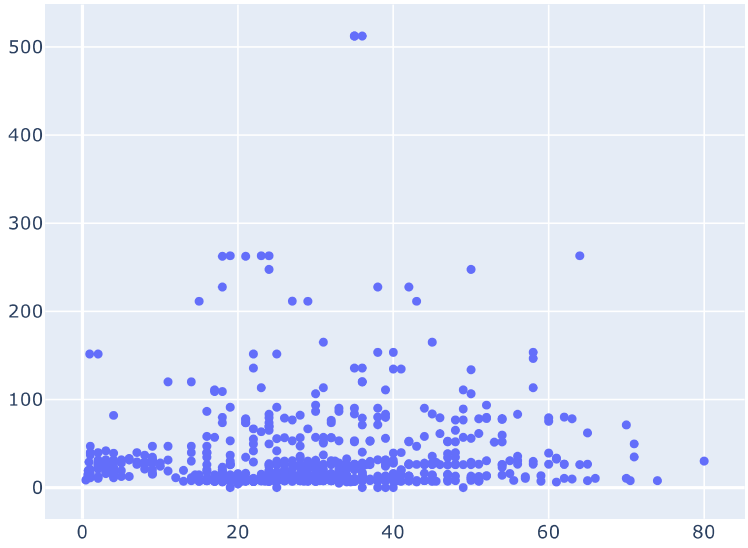
Q1. Load the "titanic" dataset using the load_dataset function of seaborn. Use Plotly express to plot a scatter plot for age and fare columns in the titanic dataset.

```
import seaborn as sns

titanic = sns.load_dataset('titanic')

import plotly.graph_objects as go

fig = go.Figure(data = [go.Scatter(x=titanic.age,y=titanic.fare,mode='markers')])
fig.show()
```

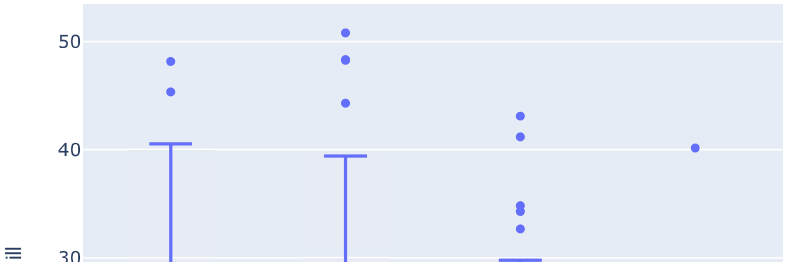


Q2. Using the tips dataset in the Plotly library, plot a box plot using Plotly express.

```
import plotly.express as px

tips_df = px.data.tips()
fig = px.box(tips_df, x="day", y="total_bill")

fig.show()
```

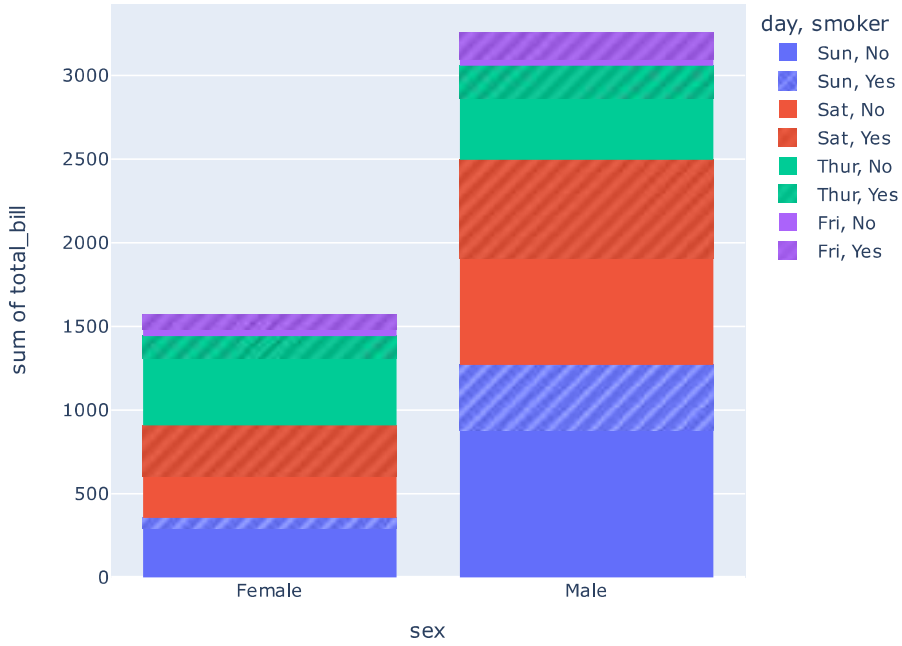


Q3. Using the tips dataset in the Plotly library, Plot a histogram for x= "sex" and y="total_bill" column in the tips dataset. Also, use the "smoker" column with the pattern_shape parameter and the "day" column with the color parameter.

```
import plotly.express as px

tips_df = px.data.tips()
fig = px.histogram(tips_df, x="sex", y="total_bill", color="day", pattern_shape="smoker")

fig.show()
```

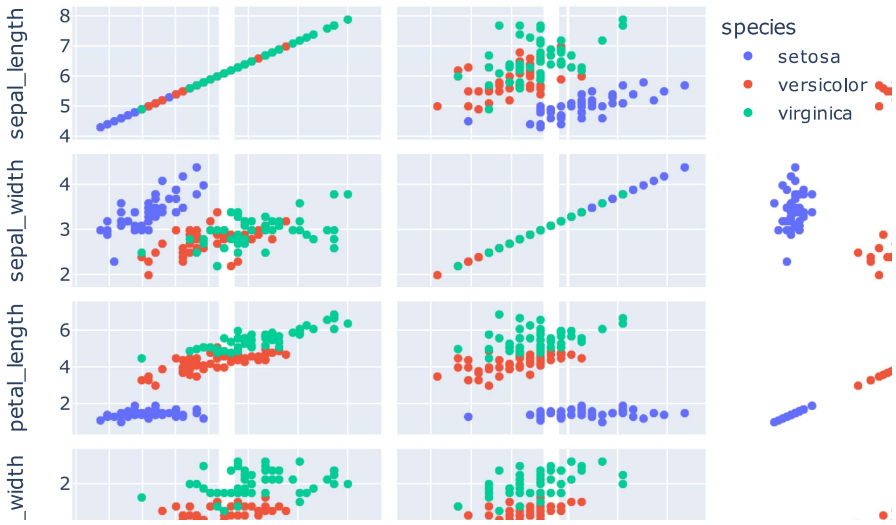


Q4. Using the iris dataset in the Plotly library, Plot a scatter matrix plot, using the "species" column for the color parameter. Note: Use "sepal_length", "sepal_width", "petal_length", "petal_width" columns only with the dimensions parameter.

```
import plotly.express as px

iris_df = px.data.iris()
fig = px.scatter_matrix(iris_df, dimensions=["sepal_length", "sepal_width", "petal_length", "petal_width"], color="species")

fig.show()
```



Q5. What is Distplot? Using Plotly express, plot a distplot.

```
# A distplot is a type of plot that shows the distribution of a numeric variable.
# It combines a histogram of the data with a kernel density estimate of the data.

import plotly.express as px

tips_df = px.data.tips()
fig = px.histogram(tips_df, x="total_bill", nbins=30, opacity=0.5)
fig.update_traces(histnorm='density')

fig.show()
```