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.

In [ ]:
```
import seaborn as sns
import plotly.express as px

# Load the Titanic dataset using Seaborn
titanic = sns.load_dataset("titanic")

# Create a scatter plot using Plotly Express
fig = px.scatter(titanic, x="age", y="fare", title="Scatter Plot of Age vs. Fare
fig.show()
```

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

In [ ]:
```
import plotly.express as px

# Load the tips dataset from Plotly
tips = px.data.tips

# Create a box plot using Plotly Express
fig = px.box(tips, x="day", y="total_bill", title="Box Plot of Total Bill by Day
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.

In [ ]:
```
import plotly.express as px

# Load the tips dataset from Plotly
tips = px.data.tips

# Create a histogram with pattern_shape and color parameters
fig = px.histogram(tips, x="sex", y="total_bill", color="day", pattern_shape="sm
                   title="Histogram of Total Bill by Sex with Smoker and Day")
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.

In [ ]:
```
import plotly.express as px

# Load the iris dataset from Plotly
iris = px.data.iris()

# Create a scatter matrix plot with species as the color parameter
fig = px.scatter_matrix(iris, dimensions=["sepal_length", "sepal_width", "petal_
                        color="species", title="Scatter Matrix Plot of Iris Data
fig.show()
```

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

Distplot is typically associated with Seaborn, not Plotly Express. A distplot is used to visualize the distribution of a univariate dataset. In Plotly Express, you can use a histogram or a KDE (Kernel Density Estimation) plot to achieve a similar visualization.

Here's an example of how to create a distplot-like histogram using Plotly Express:

In [ ]:
```
import plotly.express as px

# Sample data
data = [1, 1, 2, 2, 2, 3, 3, 4, 4, 4, 4, 5]

# Create a histogram (similar to distplot)
fig = px.histogram(data, nbins=5, title="Histogram (Distplot-like) of Sample Dat
fig.show()
```

In [ ]:
```

```