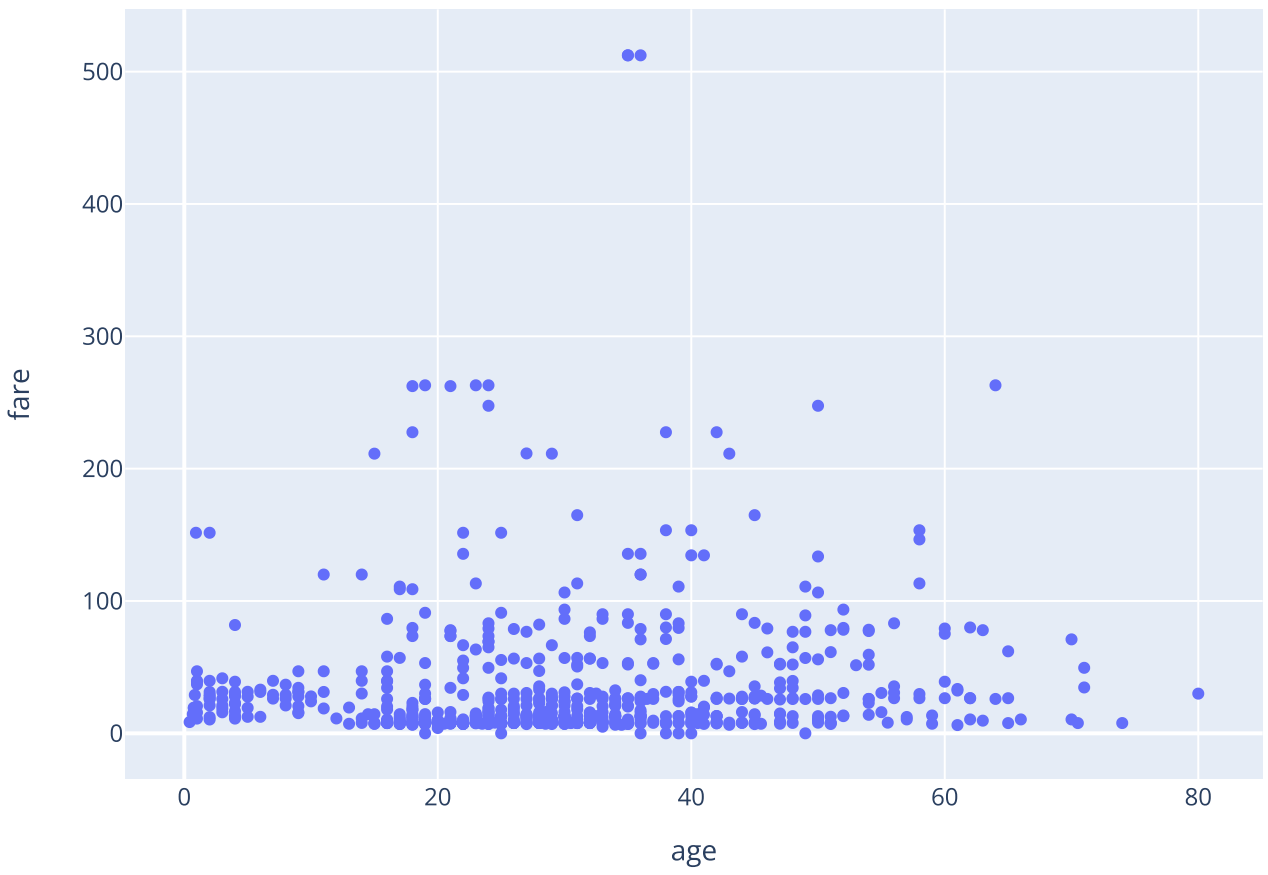
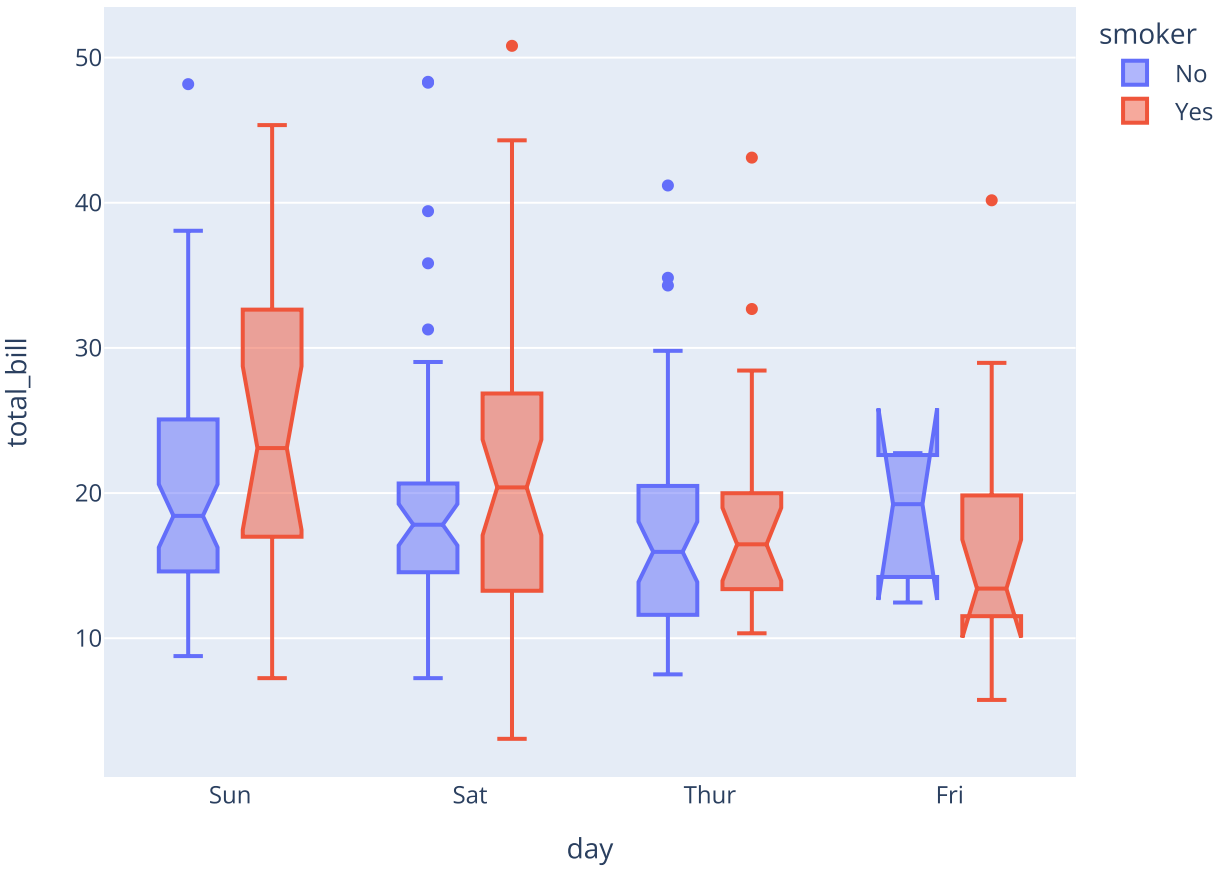
Q1. Load the "titanic" dataset using the load_dataset function of seaborn. Use Plotly express to plot a scatter plot for age and fare columns in the titanic dataset.

```
import seaborn as sns
import plotly.express as px
titanic = sns.load_dataset('titanic')
# Create scatter plot using Plotly Express
scatter_plot = px.scatter(titanic, x='age', y='fare')
scatter_plot.show()
```



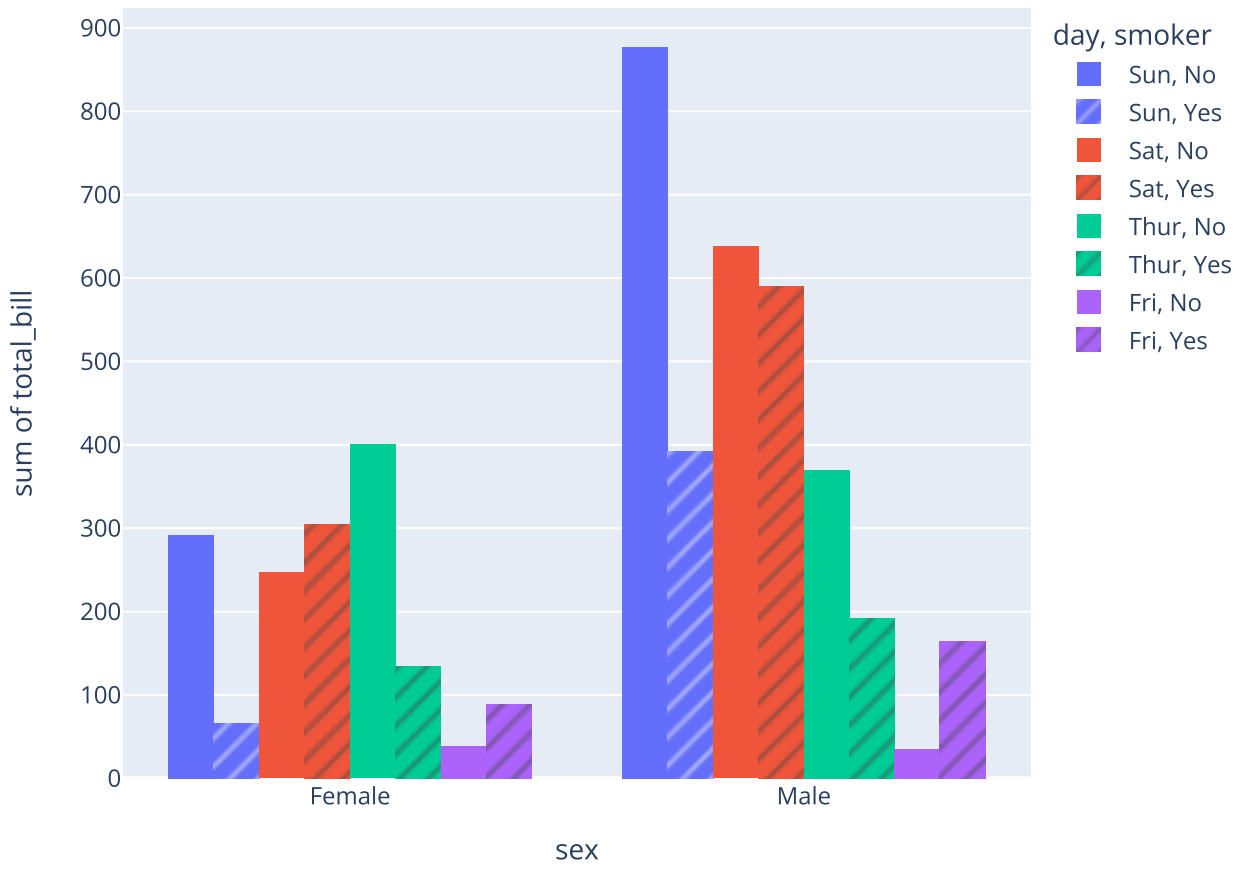
Q2. Using the tips dataset in the Plotly library, plot a box plot using Plotly express.

```
import plotly.express as px

tips = px.data.tips()
fig = px.box(tips, x="day", y="total_bill", color="smoker", notched=True)
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
import seaborn as sns

tips = sns.load_dataset("tips")
fig = px.histogram(tips, x="sex", y="total_bill", color="day", pattern_shape="smoker", barmode="group")
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
from sklearn.datasets import load_iris
iris = load_iris()
df = px.data.iris()
fig = px.scatter_matrix(df, dimensions=['sepal_length', 'sepal_width', 'petal_length', 'petal_width'], color='species')
fig.show()
```

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

```
tips = sns.load_dataset('tips')
# Plot a distplot using Plotly Express
fig = px.histogram(tips, x='total_bill', nbins=30, color='sex', opacity=0.8, marginal='rug', title='Distribution of Total Bi
fig.show()
```