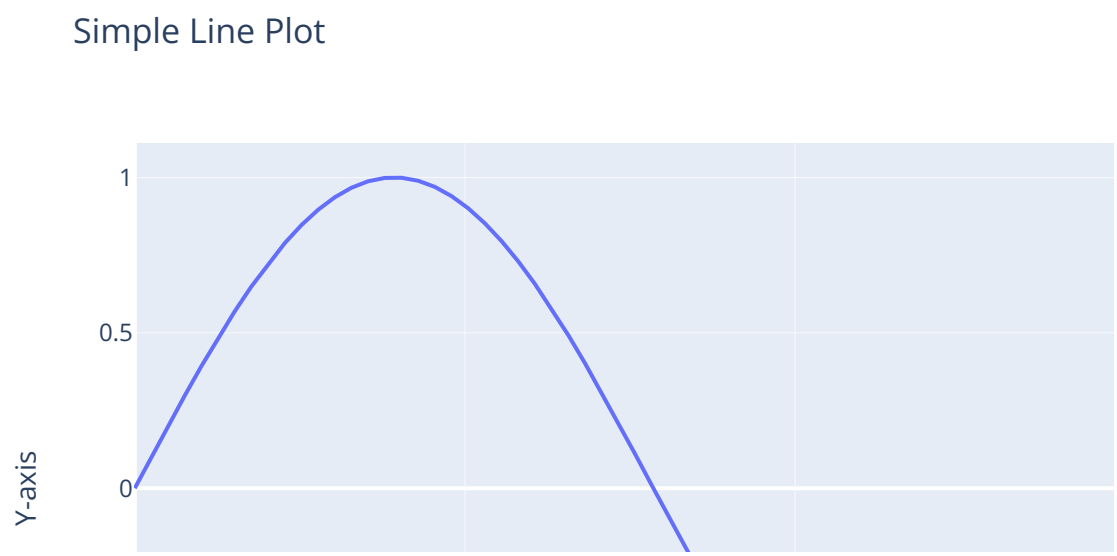
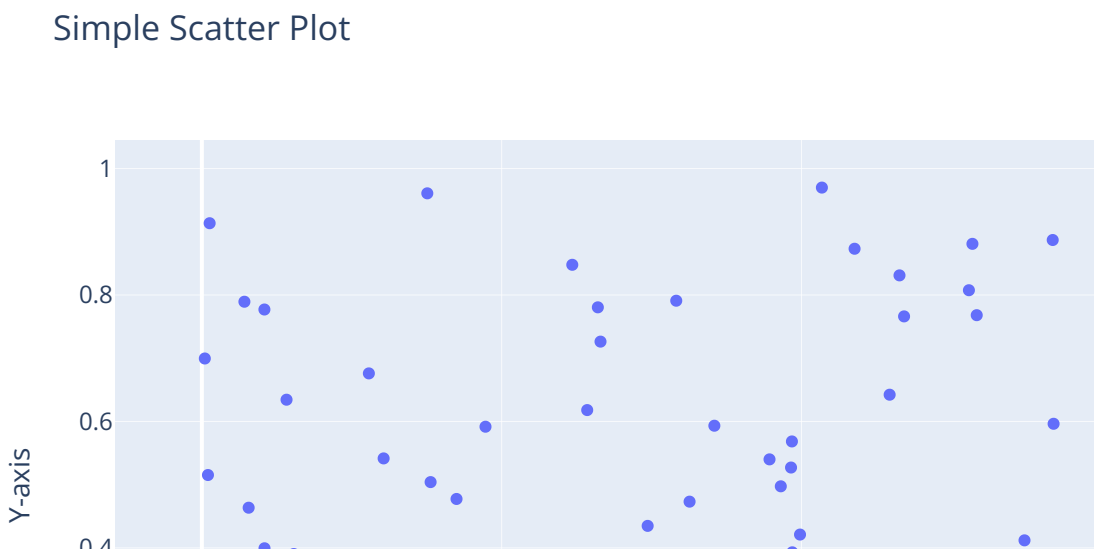
Basic Plotting with Plotly

Line Plots

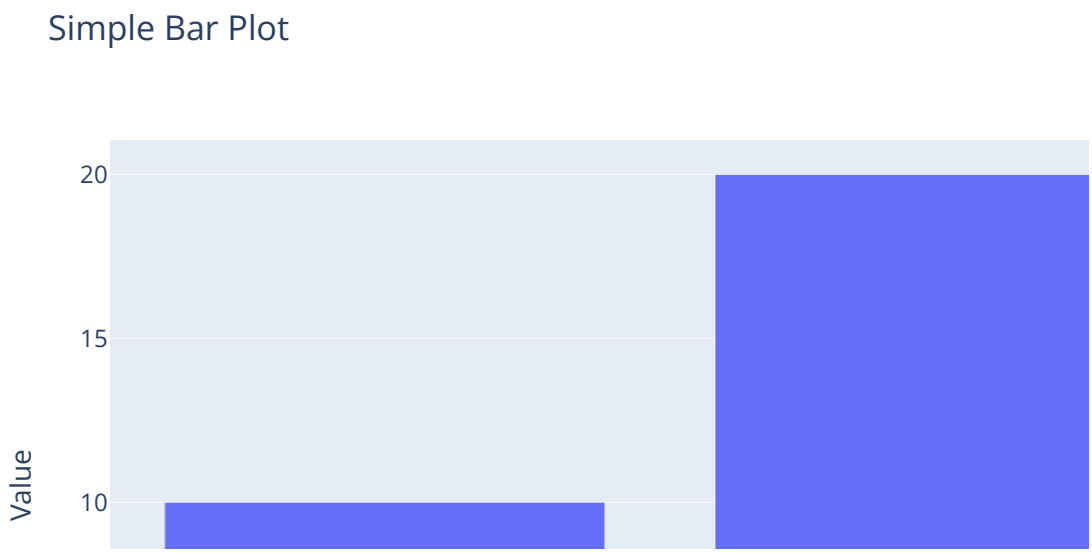
In [13]:
```
# Question: Create an interactive line plot for y=sin(x)

import plotly.graph_objs as go
import numpy as np

# Answer
x = np.linspace(0, 10, 100)
y = np.sin(x)
fig = go.Figure(data=go.Scatter(x=x, y=y, mode='lines', name='sin(x)'))
fig.update_layout(title='Simple Line Plot', xaxis_title='X-axis', yaxis_tit
fig.show()
```



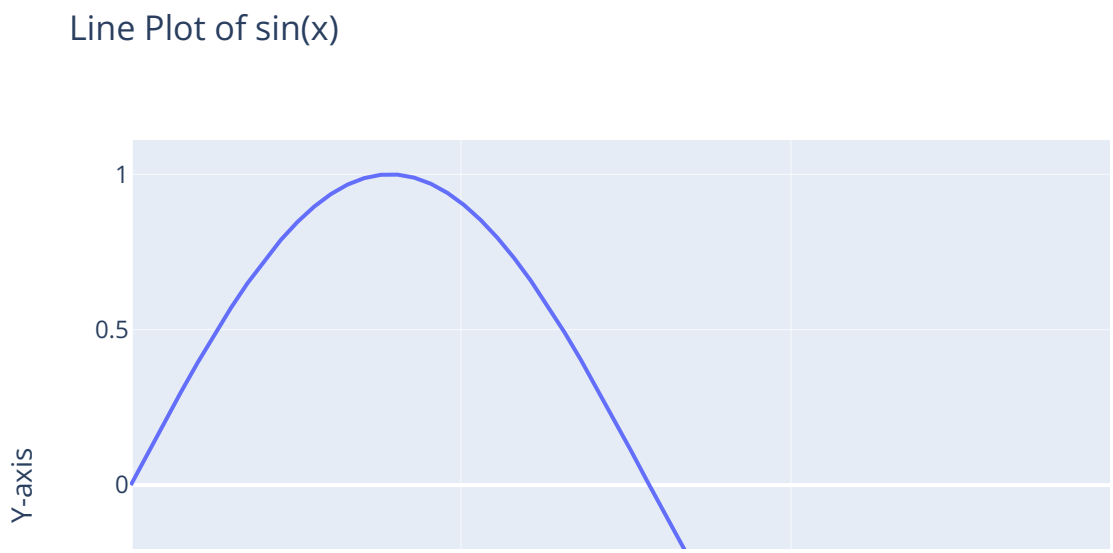
In [14]:
```
# Question: Create an interactive scatter plot using random data.

# Answer
x = np.random.rand(100)
y = np.random.rand(100)
fig = go.Figure(data=go.Scatter(x=x, y=y, mode='markers', name='Random Scat
fig.update_layout(title='Simple Scatter Plot', xaxis_title='X-axis', yaxis_
fig.show()
```



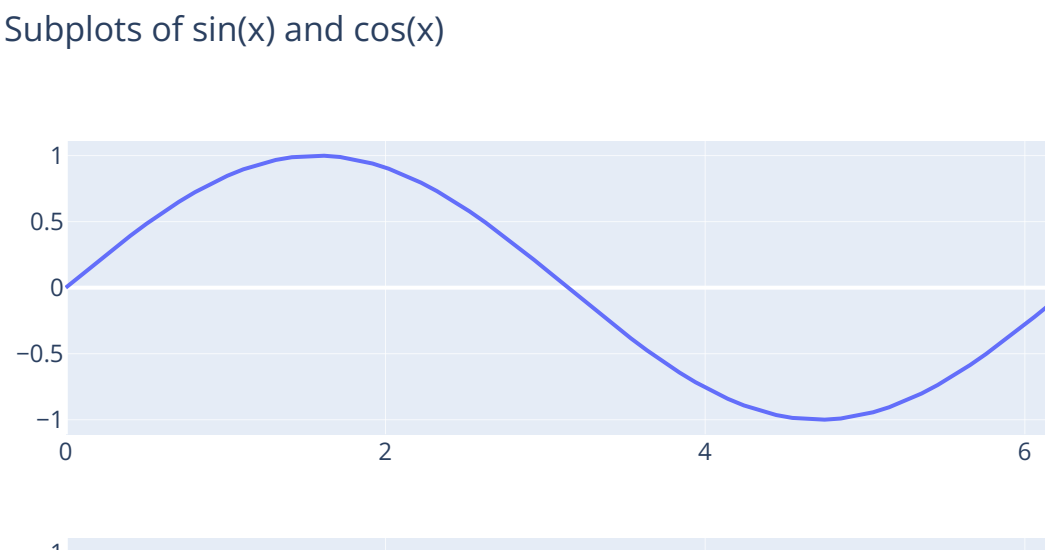
In [15]:
```
# Question: Create an interactive bar plot for the given categories and val

# Answer
categories = ['A', 'B', 'C']
values = [10, 20, 15]
fig = go.Figure(data=go.Bar(x=categories, y=values, name='Values'))
fig.update_layout(title='Simple Bar Plot', xaxis_title='Category', yaxis_ti
fig.show()
```



In [16]:
```
# Question: Add titles and labels to an interactive line plot of y= sin(x)

# Answer
x = np.linspace(0, 10, 100)
y = np.sin(x)
fig = go.Figure(data=go.Scatter(x=x, y=y, mode='lines', name='sin(x)'))
fig.update_layout(title='Line Plot of sin(x)', xaxis_title='X-axis', yaxis_
fig.show()
```



In [17]:
```python
# Question: Create subplots for y = sin(x) and y = cos(x) using Plotly

import plotly.subplots as sp

# Answer
x = np.linspace(0, 10, 100)
y1 = np.sin(x)
y2 = np.cos(x)
fig = sp.make_subplots(rows=2, cols=1)
fig.add_trace(go.Scatter(x=x, y=y1, mode='lines', name='sin(x)'), row=1, co
fig.add_trace(go.Scatter(x=x, y=y2, mode='lines', name='cos(x)'), row=2, co
fig.update_layout(title='Subplots of sin(x) and cos(x)')
fig.show()
```



In [ ]: