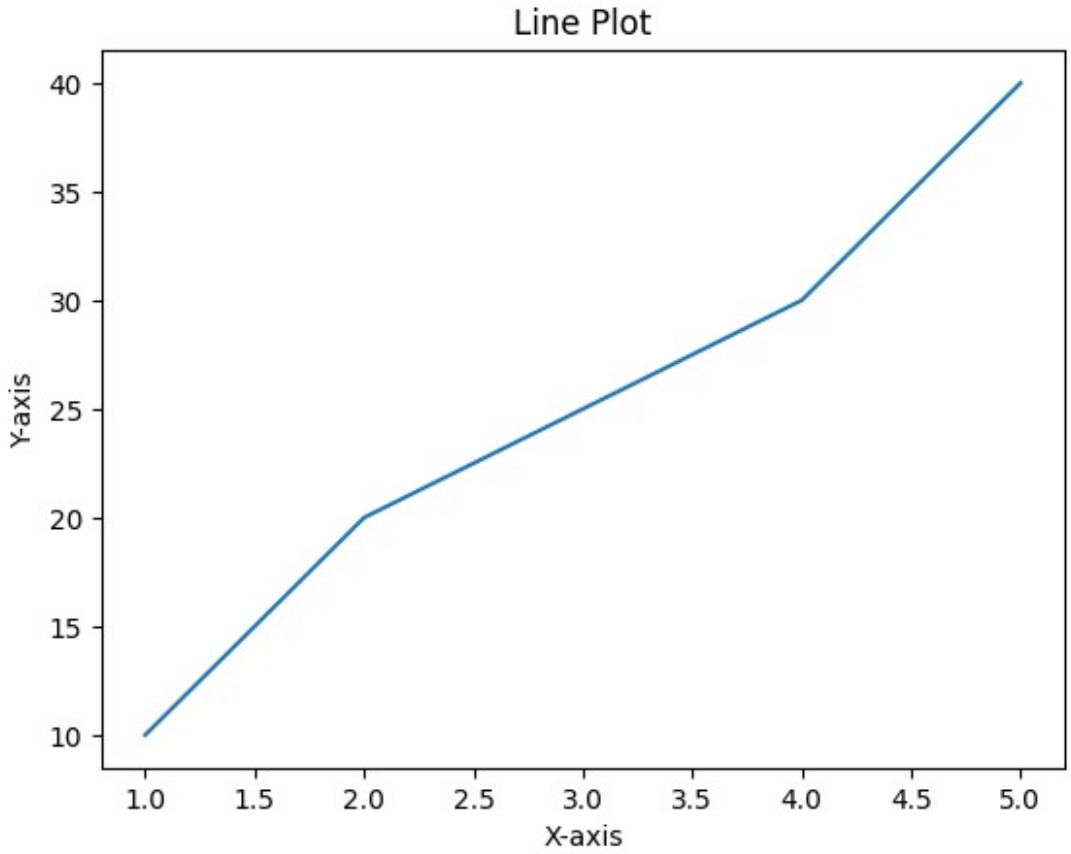
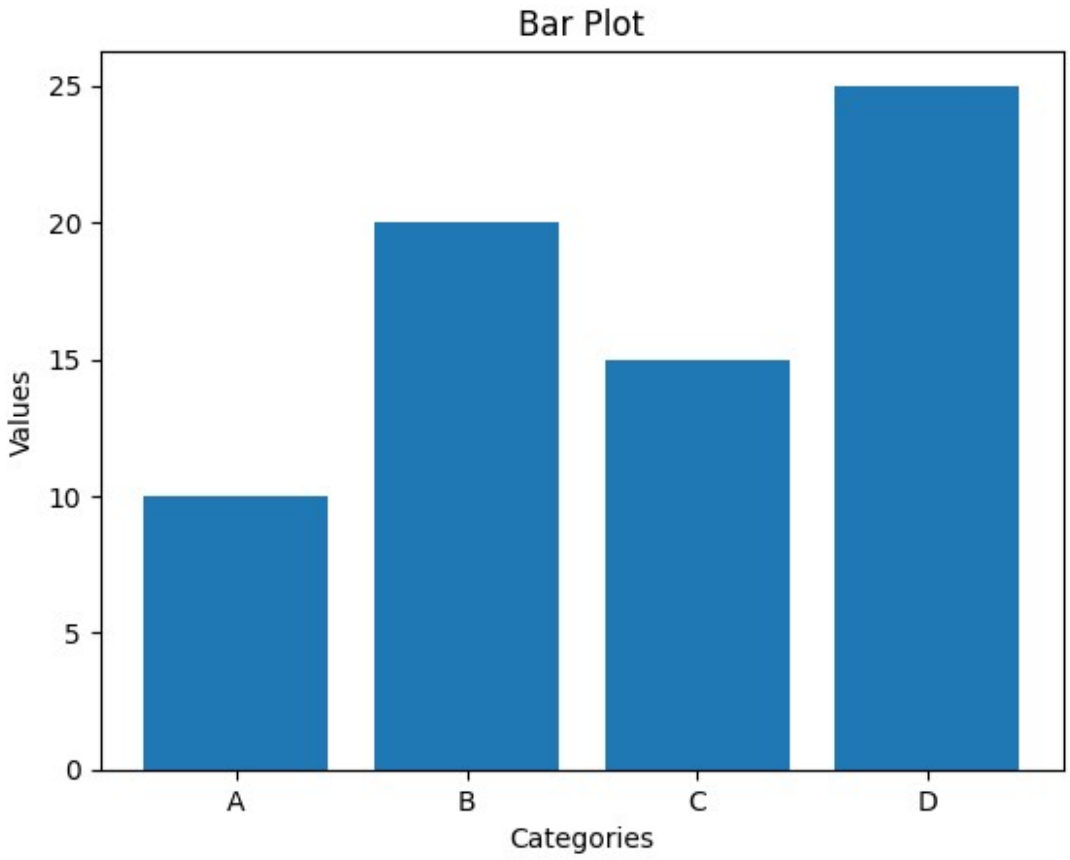
MATPLOTLIB

```
import matplotlib.pyplot as plt

x = [1, 2, 3, 4, 5]
y = [10, 20, 25, 30, 40]

plt.plot(x, y)
plt.title('Line Plot')
plt.xlabel('X-axis')
plt.ylabel('Y-axis')
plt.show()
```

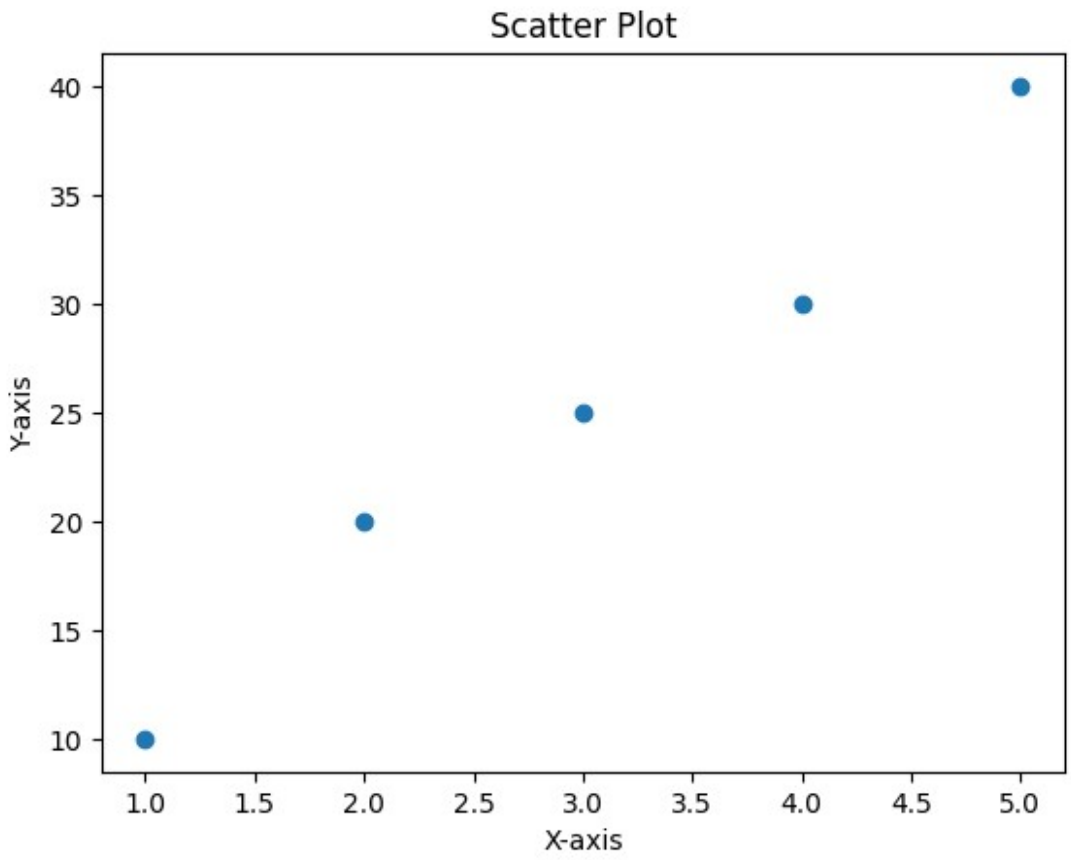



```
import matplotlib.pyplot as plt

x = ['A', 'B', 'C', 'D']
y = [10, 20, 15, 25]

plt.bar(x, y)
plt.title('Bar Plot')
plt.xlabel('Categories')
```

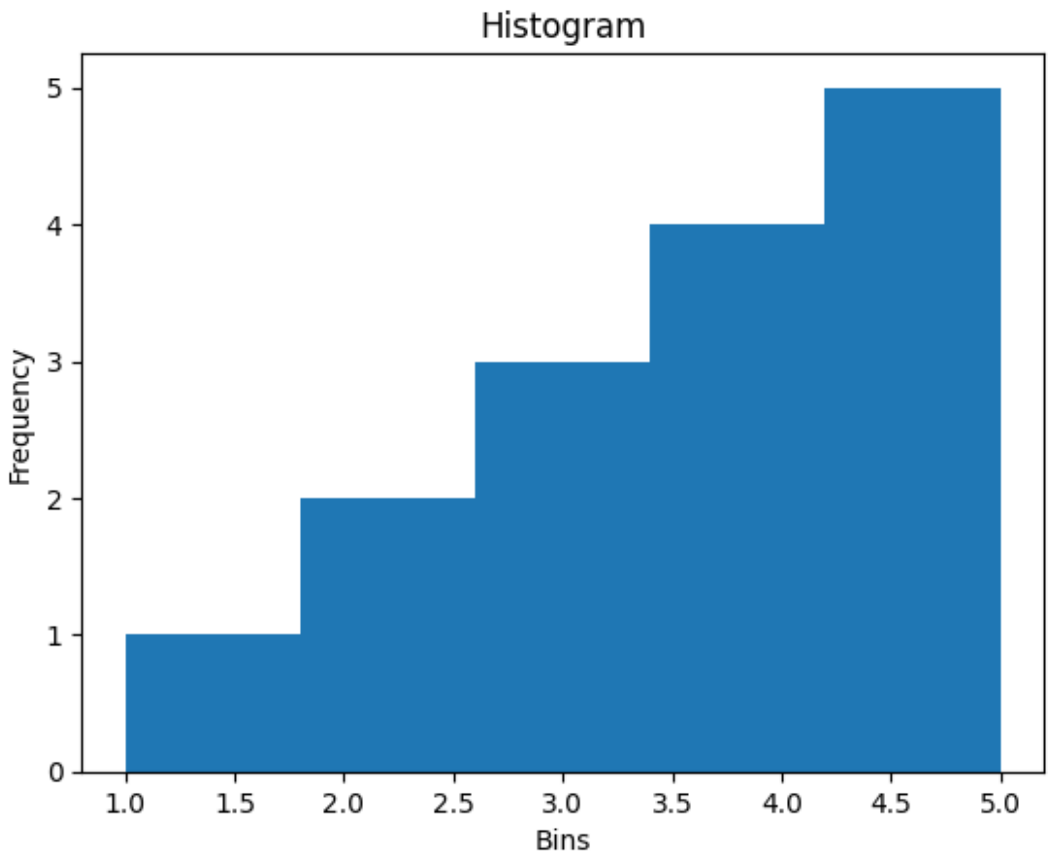
```
plt.ylabel('Values')
plt.show()
```



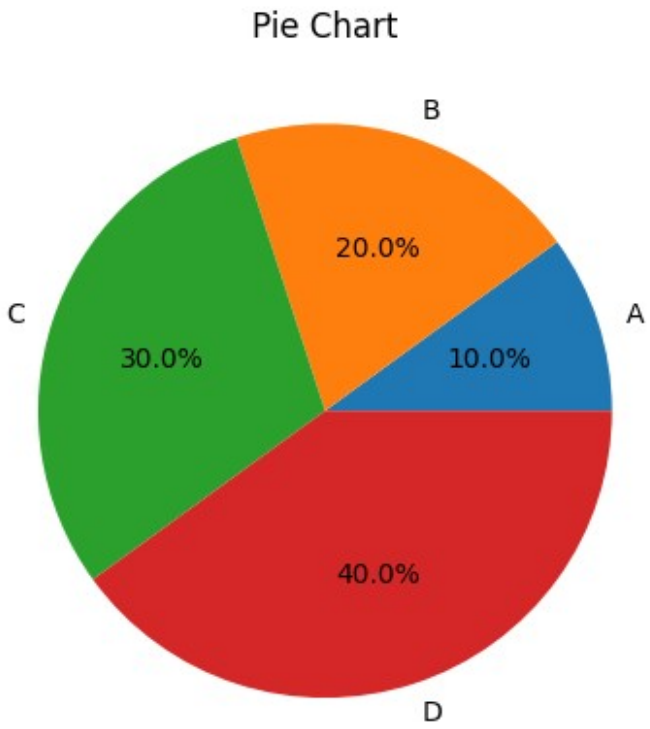

```
import matplotlib.pyplot as plt

x = [1, 2, 3, 4, 5]
y = [10, 20, 25, 30, 40]

plt.scatter(x, y)
plt.title('Scatter Plot')
plt.xlabel('X-axis')
plt.ylabel('Y-axis')
plt.show()
```




```
import matplotlib.pyplot as plt

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

plt.hist(data, bins=5)
plt.title('Histogram')
plt.xlabel('Bins')
plt.ylabel('Frequency')
plt.show()
```



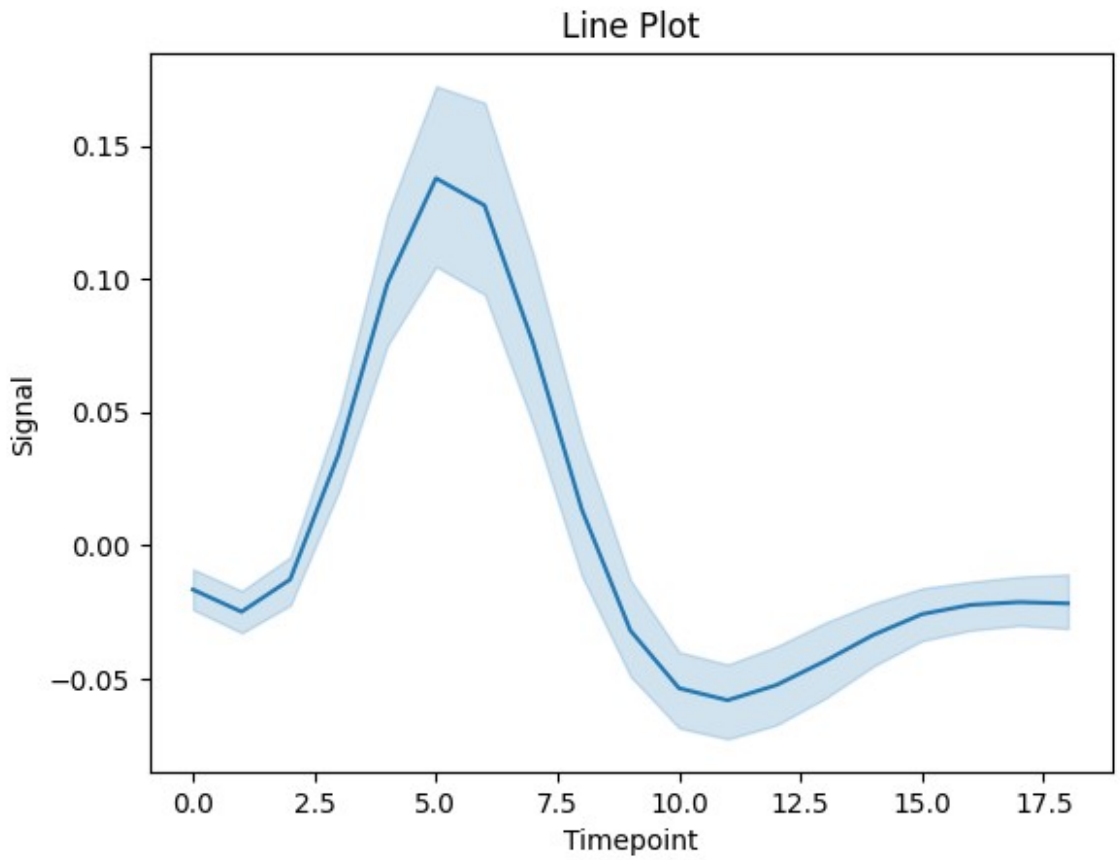

```
import matplotlib.pyplot as plt

labels = ['A', 'B', 'C', 'D']
sizes = [10, 20, 30, 40]

plt.pie(sizes, labels=labels, autopct='%1.1f%%')
plt.title('Pie Chart')
plt.show()
```



SEABORN

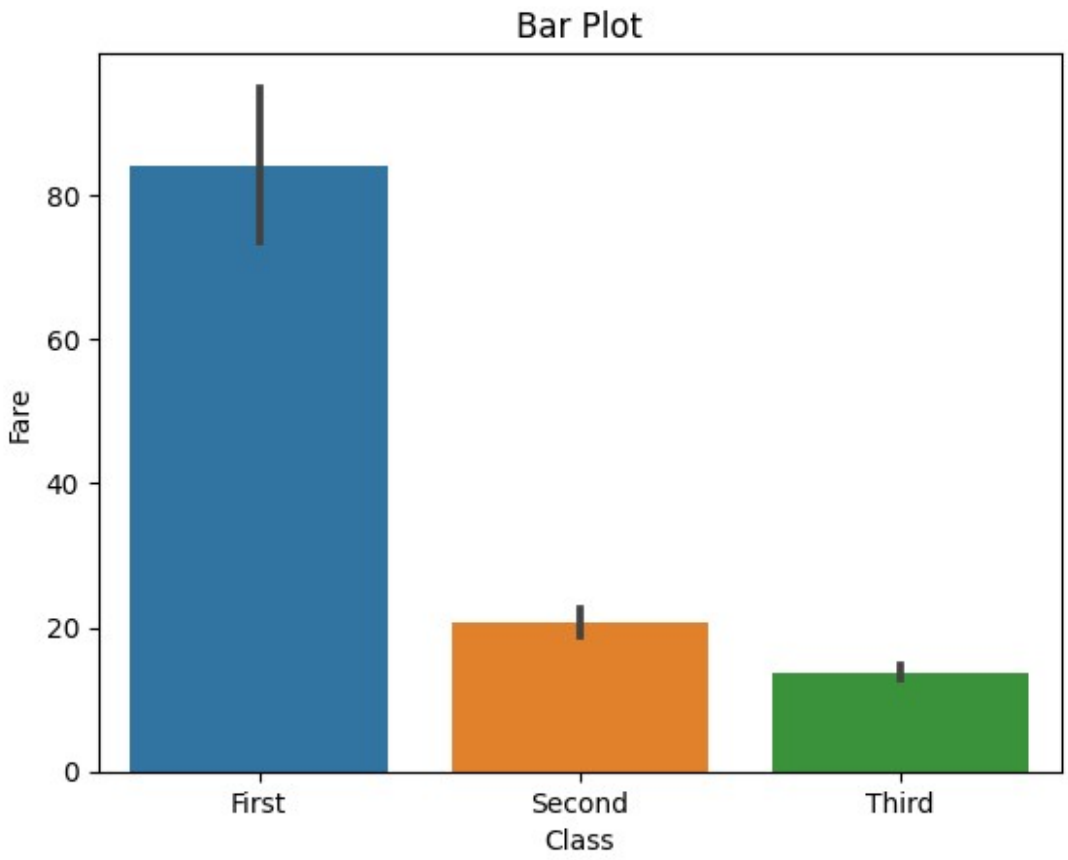
```
import seaborn as sns
import matplotlib.pyplot as plt

data = sns.load_dataset('fmri')

sns.lineplot(x='timepoint', y='signal', data=data)
plt.title('Line Plot')
plt.xlabel('Timepoint')
plt.ylabel('Signal')
plt.show()
```

```
/opt/conda/lib/python3.10/site-packages/seaborn/_oldcore.py:1119:
FutureWarning: use_inf_as_na option is deprecated and will be removed
in a future version. Convert inf values to NaN before operating
instead.
  with pd.option_context('mode.use_inf_as_na', True):
/opt/conda/lib/python3.10/site-packages/seaborn/_oldcore.py:1119:
FutureWarning: use_inf_as_na option is deprecated and will be removed
in a future version. Convert inf values to NaN before operating
instead.
  with pd.option_context('mode.use_inf_as_na', True):
```

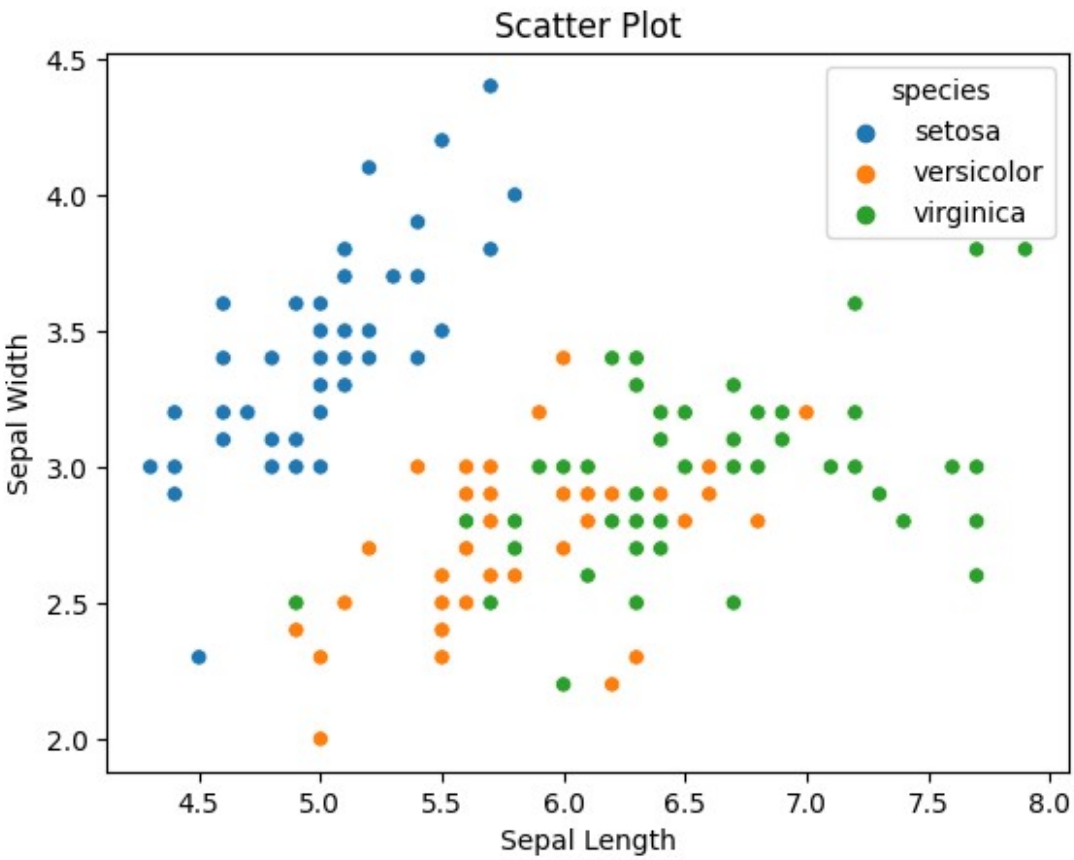



```
import seaborn as sns
import matplotlib.pyplot as plt

data = sns.load_dataset('titanic')

sns.barplot(x='class', y='fare', data=data)
plt.title('Bar Plot')
plt.xlabel('Class')
plt.ylabel('Fare')
plt.show()
```

```
/opt/conda/lib/python3.10/site-packages/seaborn/categorical.py:641:
FutureWarning: The default of observed=False is deprecated and will be
changed to True in a future version of pandas. Pass observed=False to
retain current behavior or observed=True to adopt the future default
and silence this warning.
  grouped_vals = vals.groupby(grouper)
```




```
import seaborn as sns
import matplotlib.pyplot as plt

data = sns.load_dataset('iris')

sns.scatterplot(x='sepal_length', y='sepal_width', hue='species',
data=data)
plt.title('Scatter Plot')
plt.xlabel('Sepal Length')
plt.ylabel('Sepal Width')
plt.show()
```


Scatter Plot
species
setosa
versicolor
virginica
Sepal Width
Sepal Length
4.5
4.0
3.5
3.0
2.5
2.0
4.5
5.0
5.5
6.0
6.5
7.0
7.5
8.0