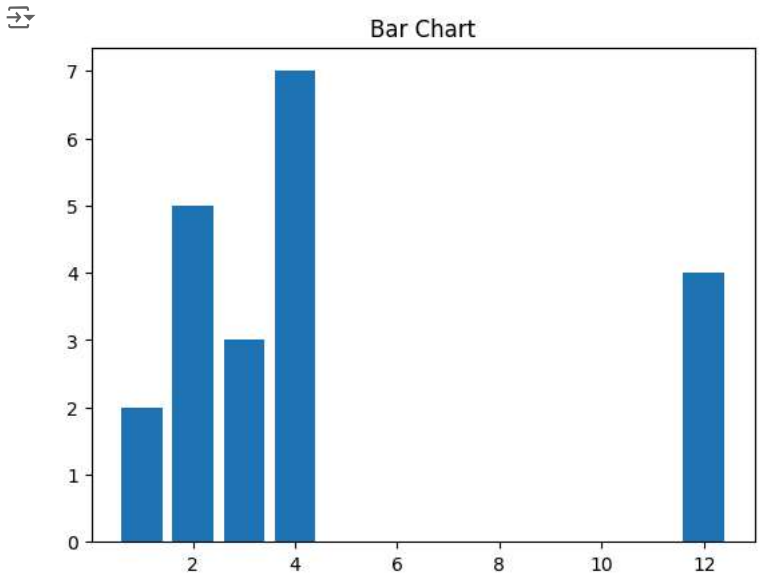
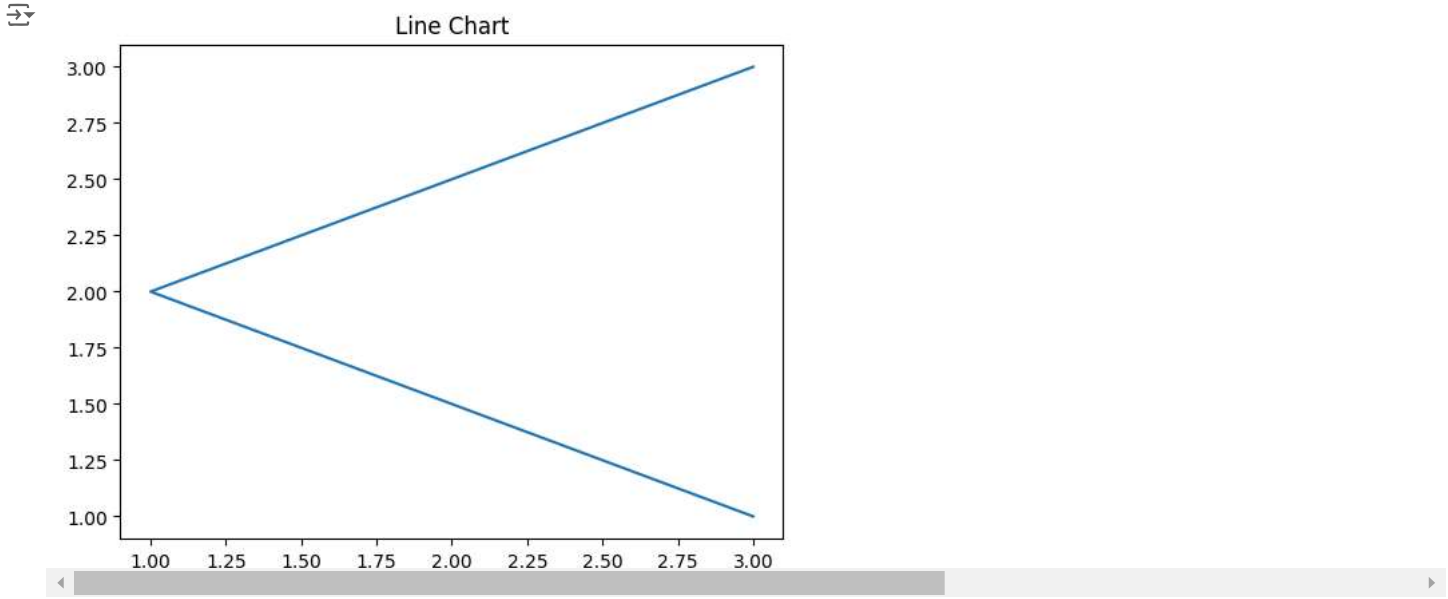
```
import matplotlib.pyplot as plt
x = [3, 1, 3, 12, 2, 4, 4]
y = [3, 2, 1, 4, 5, 6, 7]
plt.bar(x, y)
plt.title("Bar Chart")
plt.show()
```

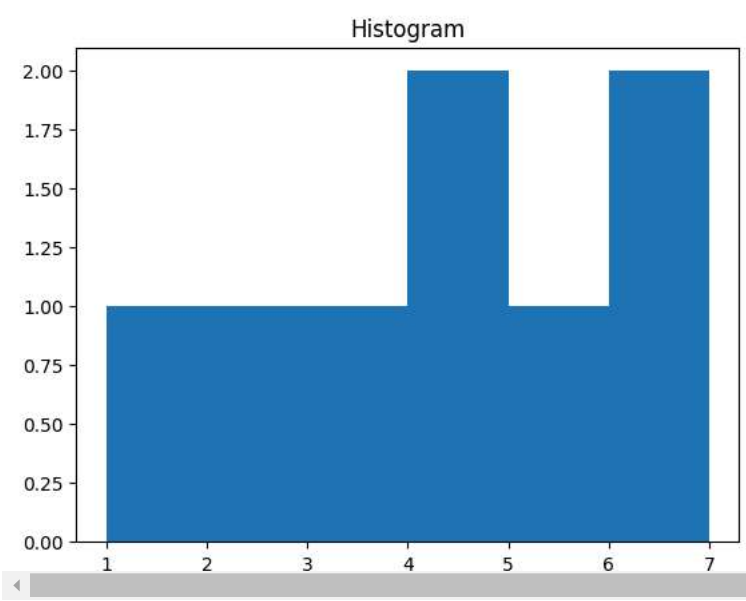


Double-click (or enter) to edit

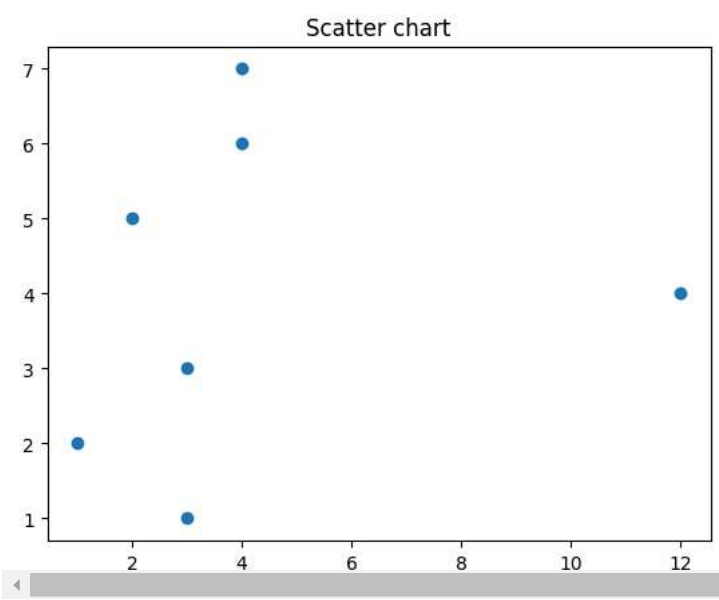
```
import matplotlib.pyplot as plt
x = [3, 1, 3]
y = [3, 2, 1]
plt.plot(x, y)
plt.title("Line Chart")
plt.show()
```




```
import matplotlib.pyplot as plt
x = [1, 2, 3, 4, 5, 6, 7, 4]
plt.hist(x, bins = [1, 2, 3, 4, 5, 6, 7])
plt.title("Histogram")
plt.show()
```



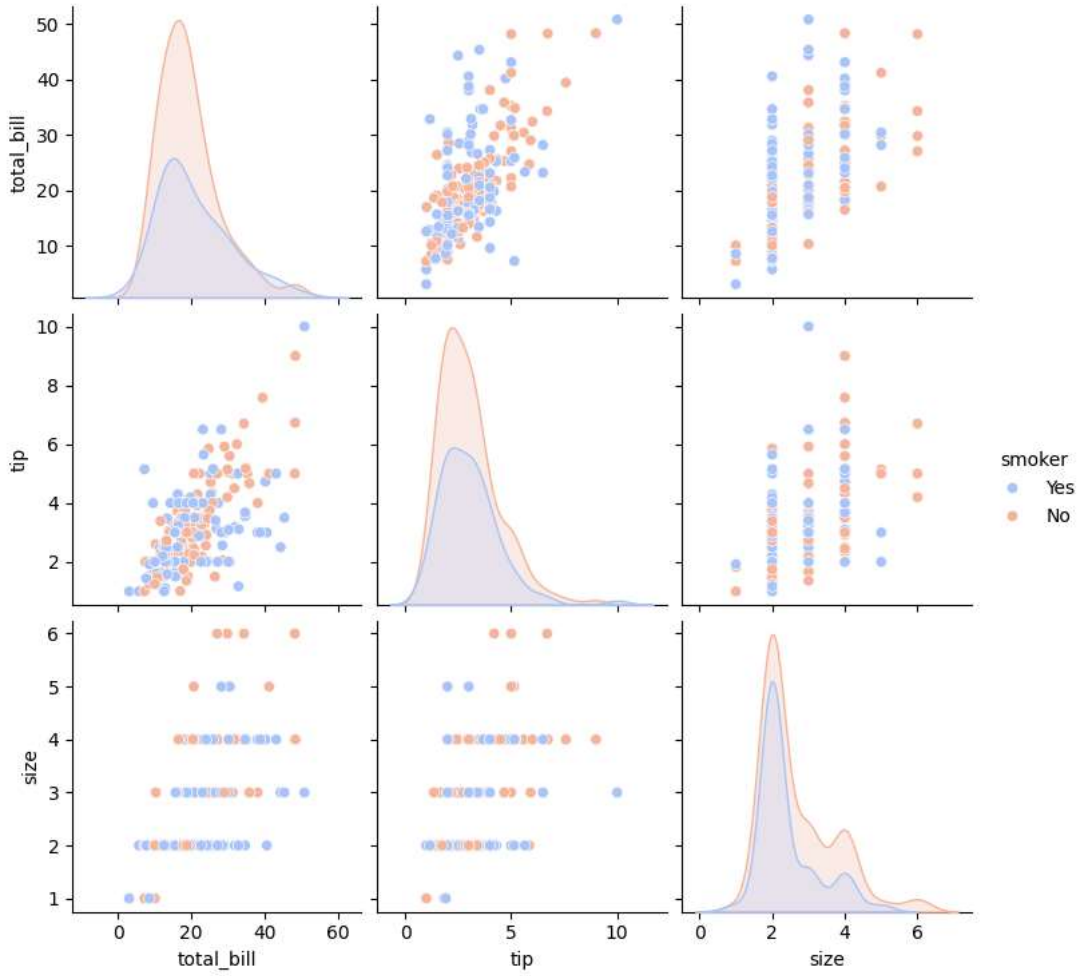

```
import matplotlib.pyplot as plt
x = [3, 1, 3, 12, 2, 4, 4]
y = [3, 2, 1, 4, 5, 6, 7]
plt.scatter(x, y)
plt.title("Scatter chart")
plt.show()
```



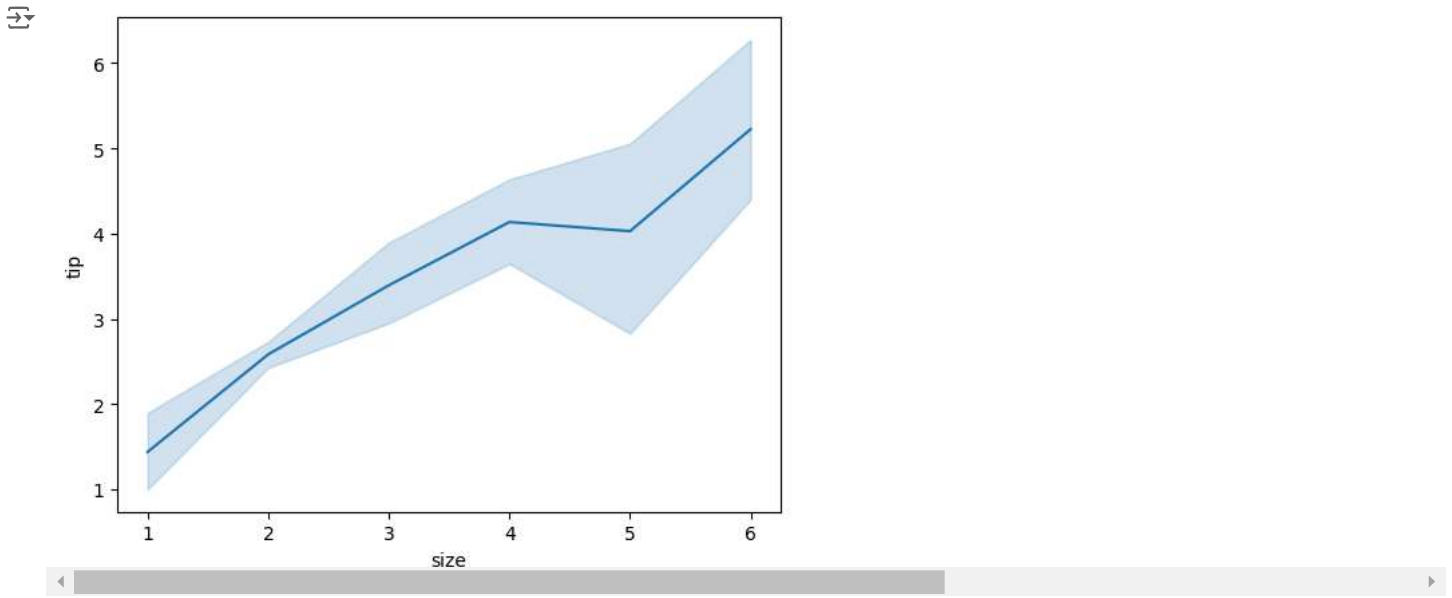

```
import matplotlib.pyplot as plt
x = [1, 2, 3, 4]
e  =(0.1, 0, 0, 0)
plt.pie(x, explode = e)
plt.title("Pie chart")
plt.show()
```


```
import seaborn as sns
import matplotlib.pyplot as plt
tips = sns.load_dataset("tips")
sns.pairplot(tips, hue="smoker", palette="coolwarm")
plt.show()
```

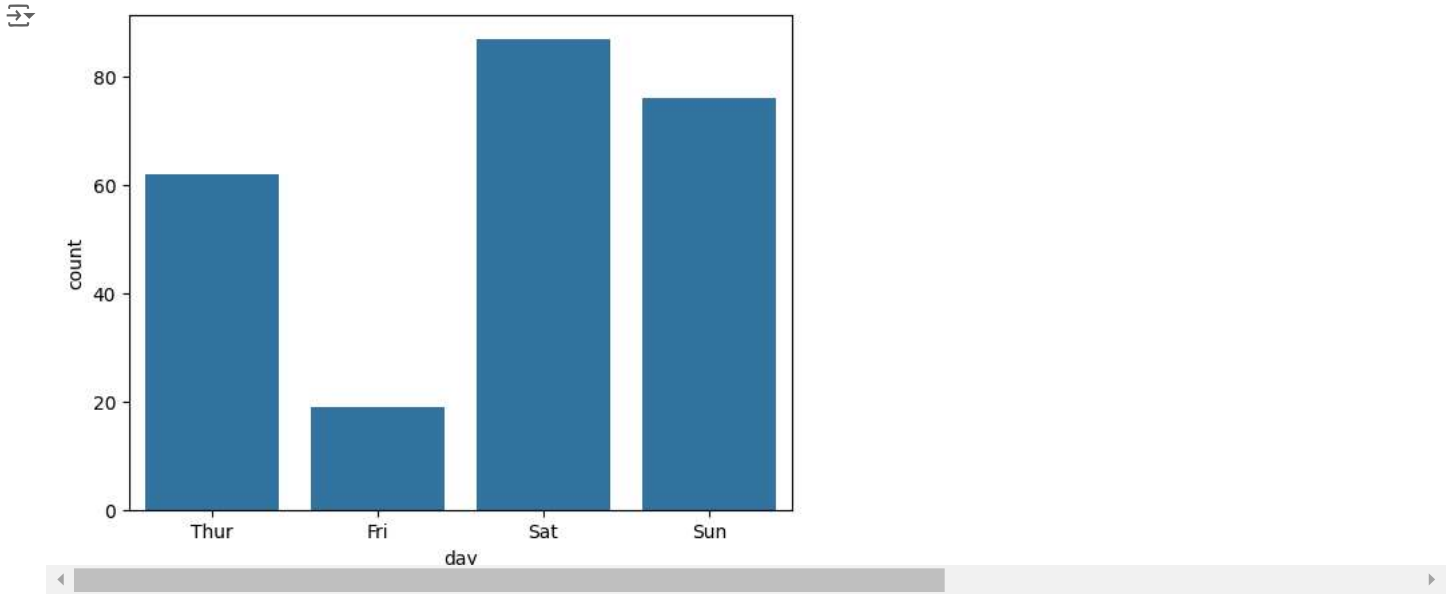
```
/usr/local/lib/python3.10/dist-packages/seaborn/_base.py:949: FutureWarning: When grouping with a length-1 list-like, you will need to p
  data_subset = grouped_data.get_group(pd_key)
/usr/local/lib/python3.10/dist-packages/seaborn/_base.py:949: FutureWarning: When grouping with a length-1 list-like, you will need to p
  data_subset = grouped_data.get_group(pd_key)
/usr/local/lib/python3.10/dist-packages/seaborn/_base.py:949: FutureWarning: When grouping with a length-1 list-like, you will need to p
  data_subset = grouped_data.get_group(pd_key)
```



```
import seaborn as sns
import matplotlib.pyplot as plt
sns.lineplot(data=tips, x="size", y="tip")
plt.show()
```

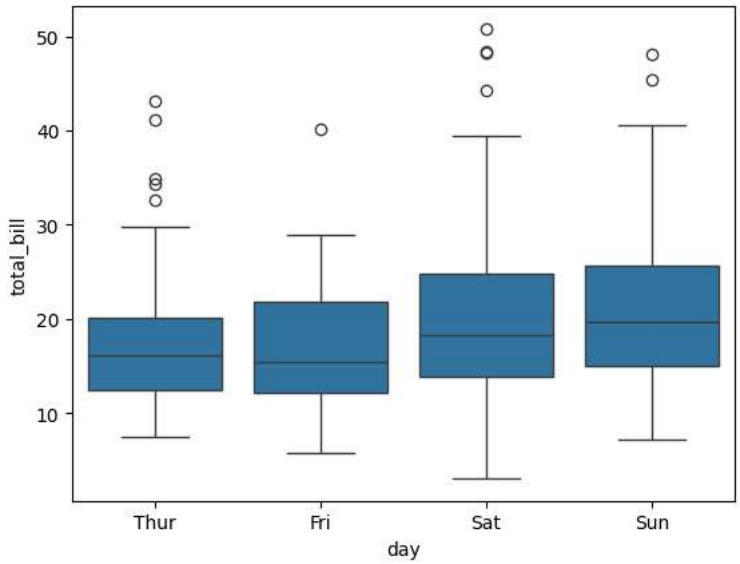



```
import seaborn as sns
import matplotlib.pyplot as plt
sns.countplot(data=tips, x="day")
plt.show()
```

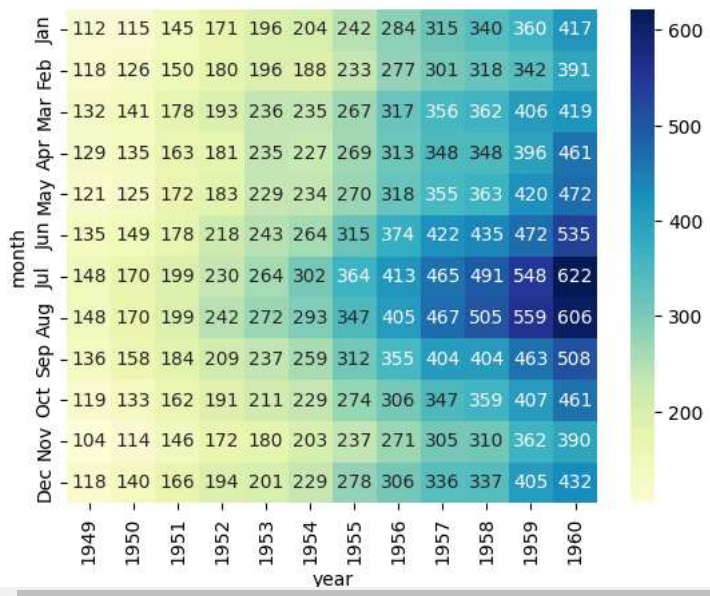



```
import seaborn as sns
import matplotlib.pyplot as plt
sns.boxplot(data=tips, x="day", y="total_bill")
plt.show()
```

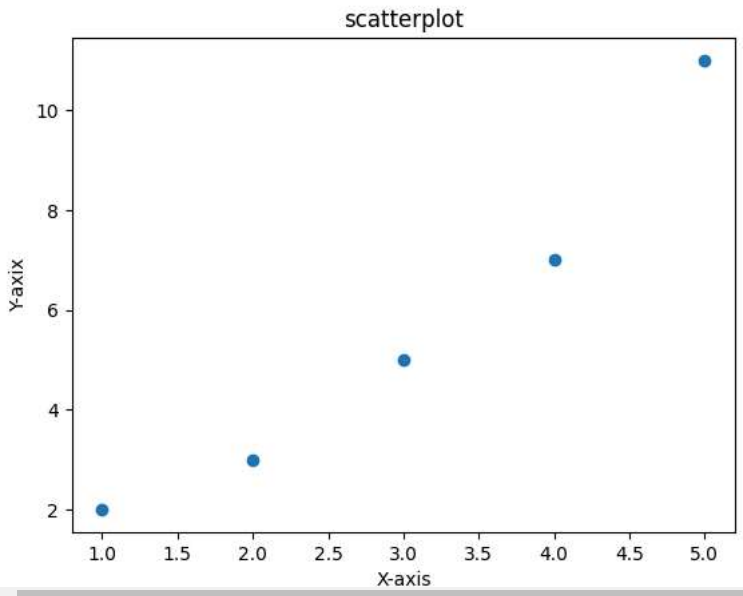
```
/usr/local/lib/python3.10/dist-packages/seaborn/categorical.py:640: FutureWarning: SeriesGroupBy.grouper is deprecated and will be remov
  positions = grouped.grouper.result_index.to_numpy(dtype=float)
```




```
import seaborn as sns
import matplotlib.pyplot as plt
flights = sns.load_dataset("flights")
flights_pivot = flights.pivot(index="month", columns="year", values="passengers")
sns.heatmap(flights_pivot, annot=True, fmt="d", cmap="YlGnBu")
plt.show()
```

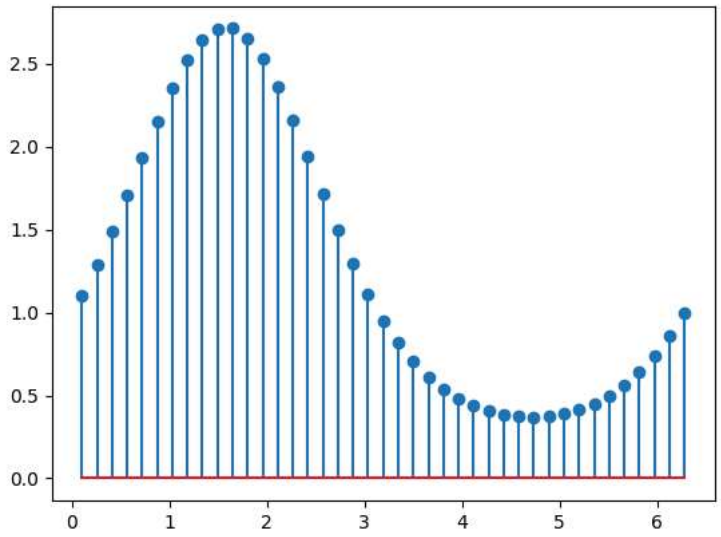



```
import matplotlib.pyplot as plt
x=[1,2,3,4,5]
y=[2,3,5,7,11]
plt.scatter(x,y)
plt.title('scatterplot')
plt.xlabel('X-axis')
plt.ylabel('Y-axix')
plt.show()
```



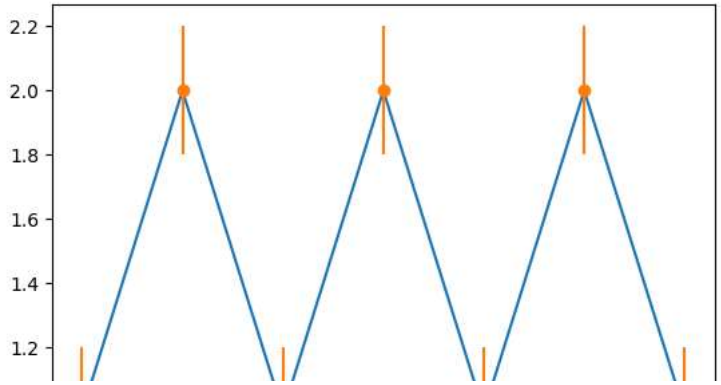

```
import matplotlib.pyplot as plt
import numpy as np
x = np.linspace(0.1, 2 * np.pi, 41)
y = np.exp(np.sin(x))
plt.stem(x, y, use_line_collection = True)
plt.show()
```

```
<ipython-input-1-6bb3b1330d0c>:5: MatplotlibDeprecationWarning: The 'use_line_collection' parameter of stem() was deprecated in Matplotl
  plt.stem(x, y, use_line_collection = True)
```




```
import matplotlib.pyplot as plt
x =[1, 2, 3, 4, 5, 6, 7]
y =[1, 2, 1, 2, 1, 2, 1]
y_error = 0.2
plt.plot(x, y)
plt.errorbar(x, y,
             yerr = y_error,
             fmt ='o')
```

```
<ErrorbarContainer object of 3 artists>
```




```
import seaborn as sns
import matplotlib.pyplot as plt
tips = sns.load_dataset("tips")
sns.relplot(data=tips, x="total_bill", y="tip", hue="smoker")
plt.show()
```