

```
In [ ]: """
1. Scatter Plots

Use case: Show relationships between two continuous variables.

- Ideal for: Correlation analysis, outlier detection, and pattern identification.
- Example: Analyzing the relationship between temperature and humidity.

2. Line Plots

Use case: Display trends or patterns over time or across categories.

- Ideal for: Time series analysis, comparing multiple series, and showing trends.
- Example: Visualizing website traffic over months.

3. Bar Plots

Use case: Compare categorical data across groups.

- Ideal for: Comparing frequencies, proportions, or values across categories.
- Example: Sales by region or product.

4. Pie Charts

Use case: Show proportional data, typically for categorical data.

- Ideal for: Displaying composition or distribution of a whole.
- Example: Market share analysis. """
```

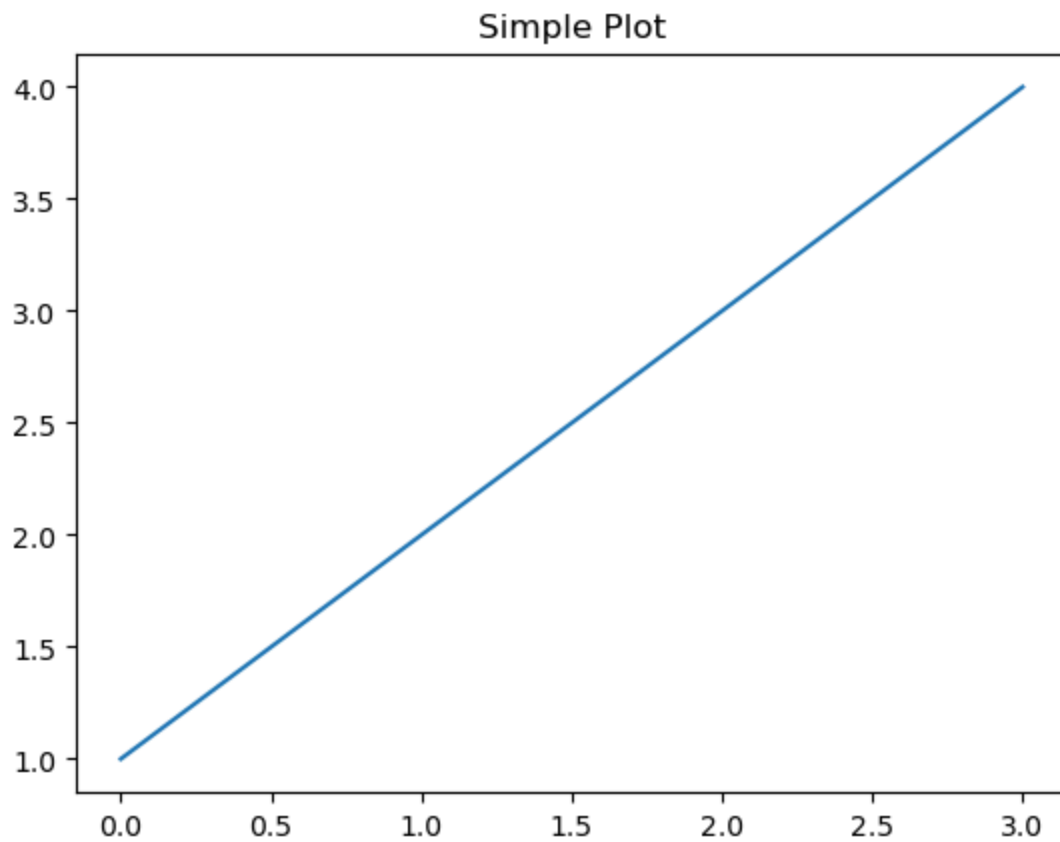
```
In [4]: #ENABLE MAGIC FUNCTION IN JUPYTER NOTEBOOK

import matplotlib.pyplot as plt

%matplotlib inline

plt.plot([1, 2, 3, 4])
plt.title('Simple Plot')
```

```
Out[4]: Text(0.5, 1.0, 'Simple Plot')
```



In [1]: *# Alternative Code for the Matplotlib magic function*

```
import matplotlib.pyplot as plt
```

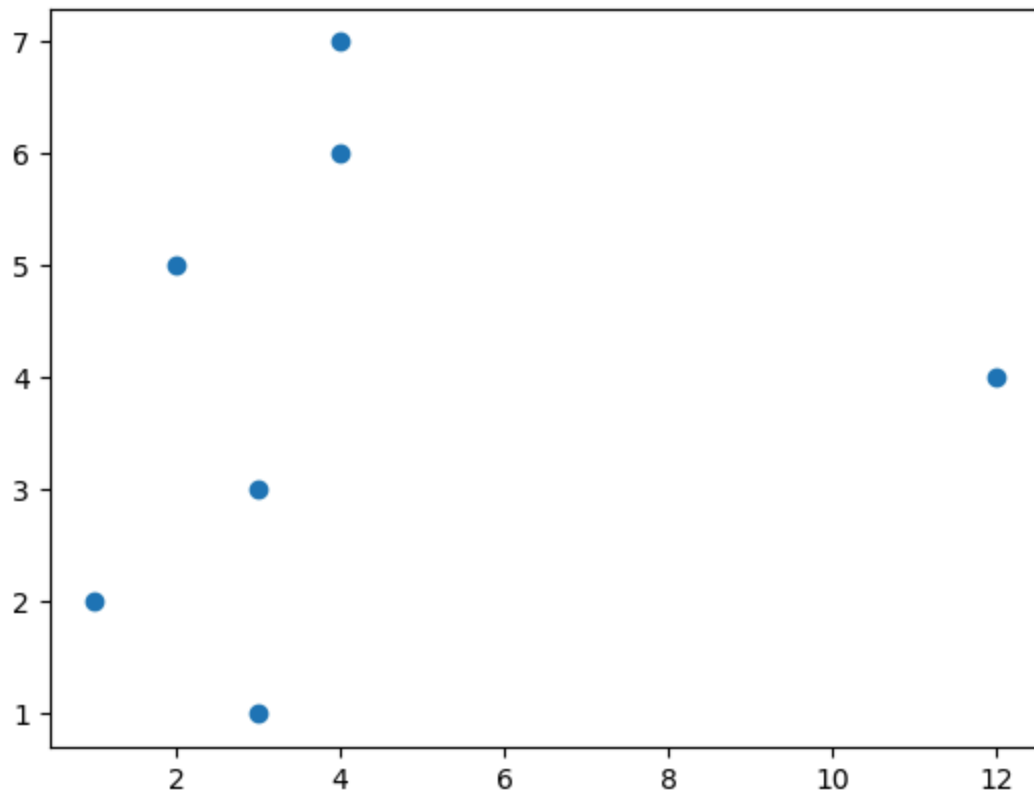
```
# Scatter plot
```

```
x = [3, 1, 3, 12, 2, 4, 4]
```

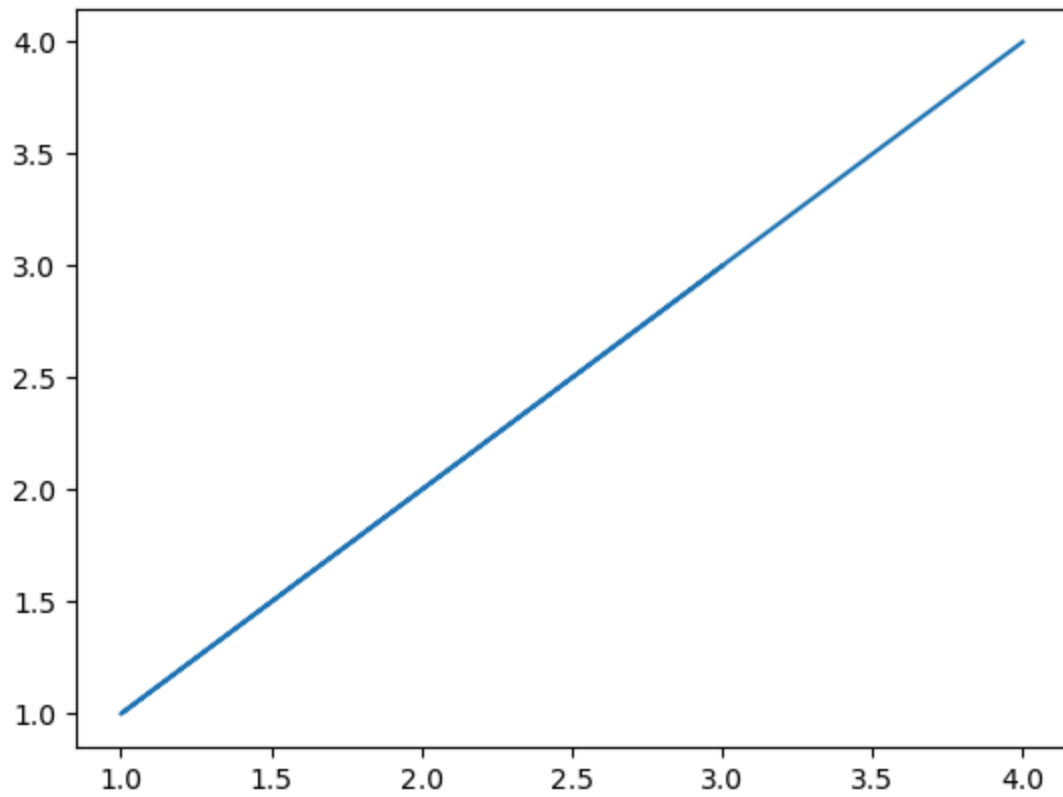
```
y = [3, 2, 1, 4, 5, 6, 7]
```

```
plt.scatter(x, y)
```

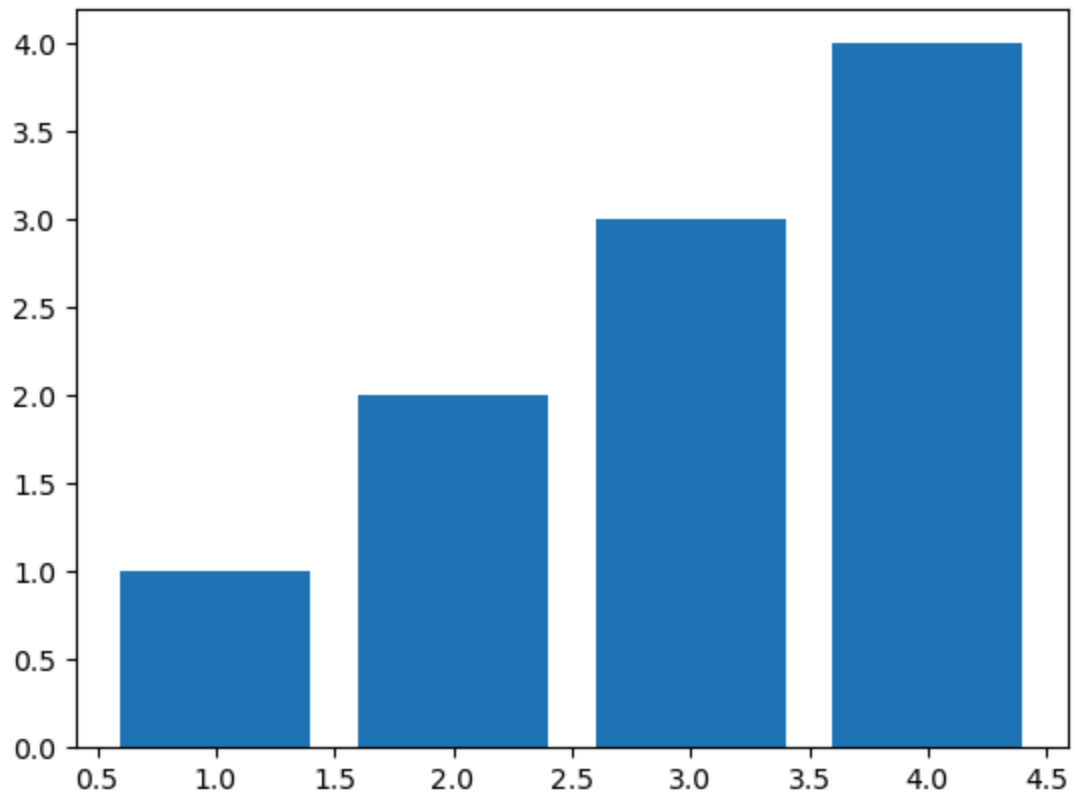
```
plt.show()
```



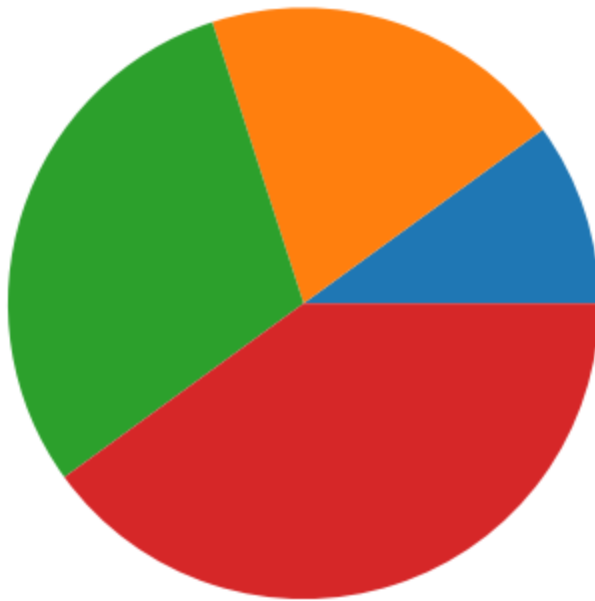
```
In [2]: # Line plot  
  
x = [3, 2, 1, 4]  
  
y = [3, 2, 1, 4]  
plt.plot(x,y)  
plt.show()
```



```
In [3]: # Bar plot  
  
x = [3, 2, 1, 4]  
y = [3, 2, 1, 4]  
  
plt.bar(x,y)  
plt.show()
```



```
In [5]: # Pie chart
x = [1, 2, 3, 4]
plt.pie(x)
plt.show()
```



In []:

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