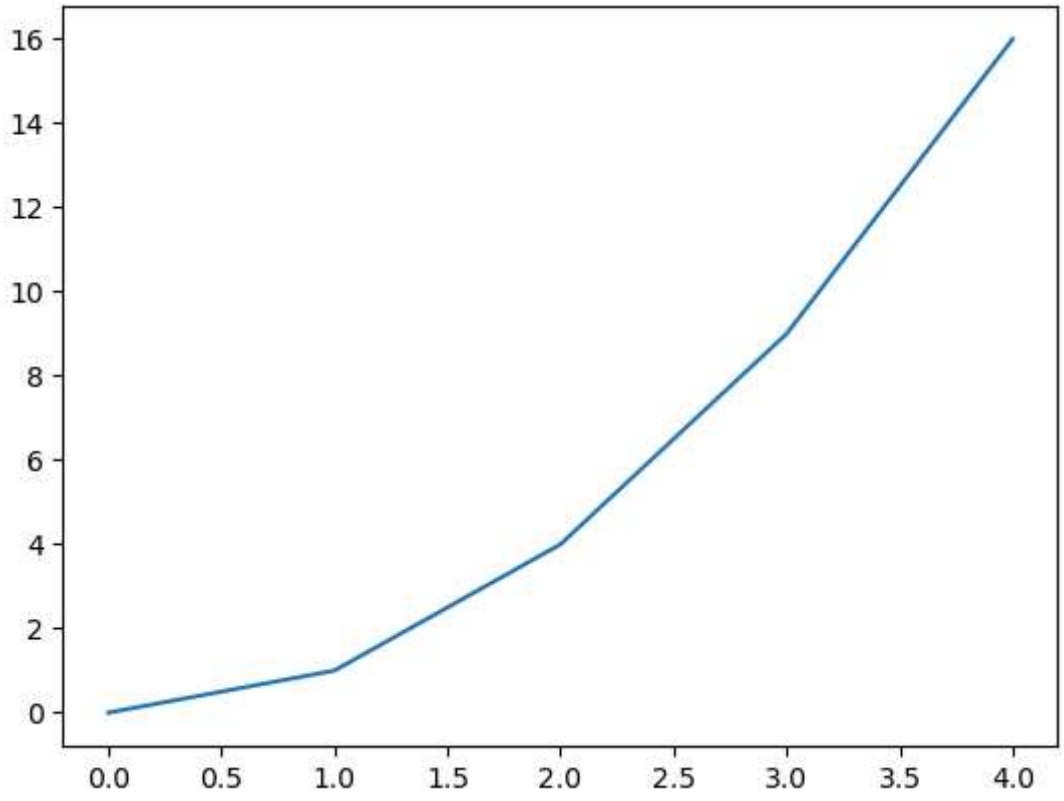
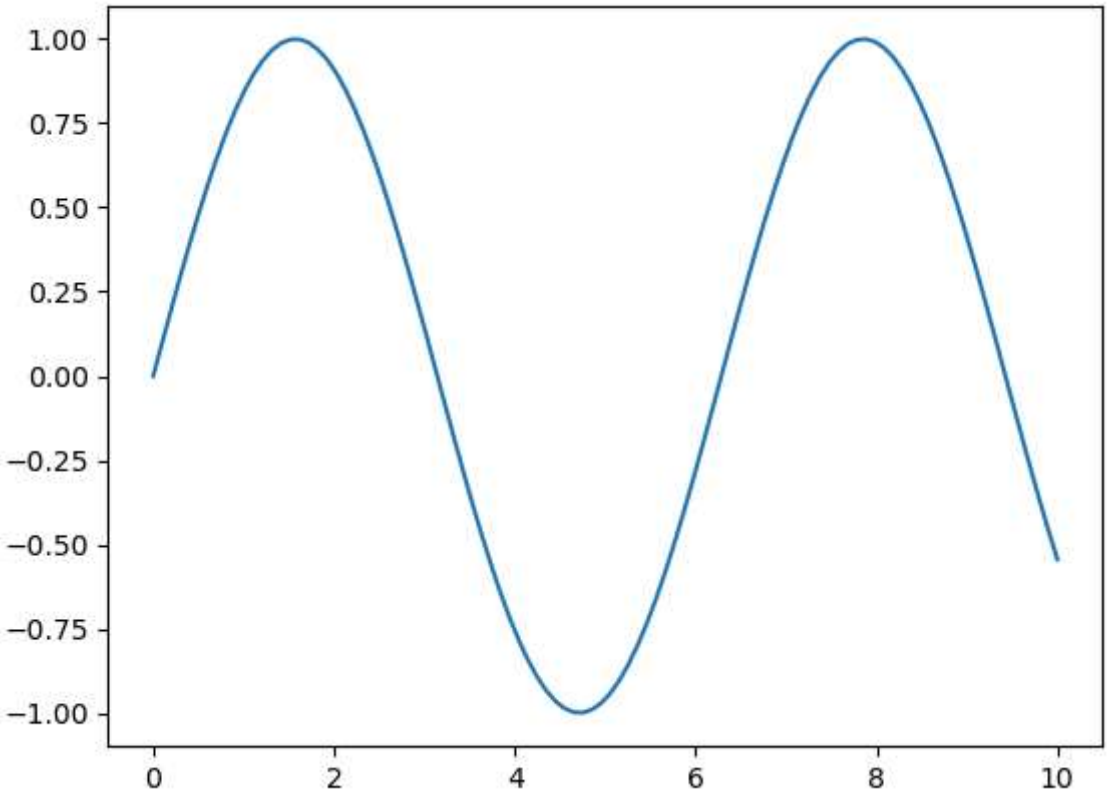
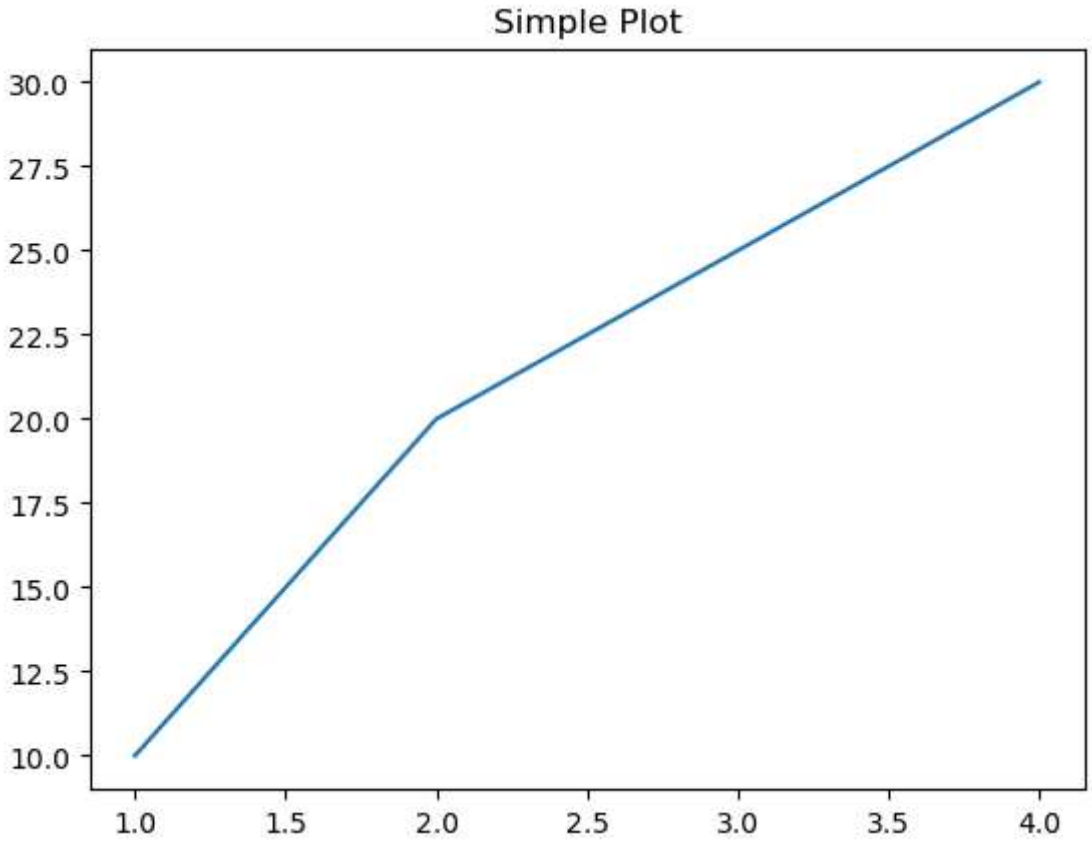
In [1]:
```
import matplotlib.pyplot as plt
import numpy as np

x = np.array([0, 1, 2, 3, 4])
y = np.array([0, 1, 4, 9, 16])
plt.plot(x, y)
plt.show()
```



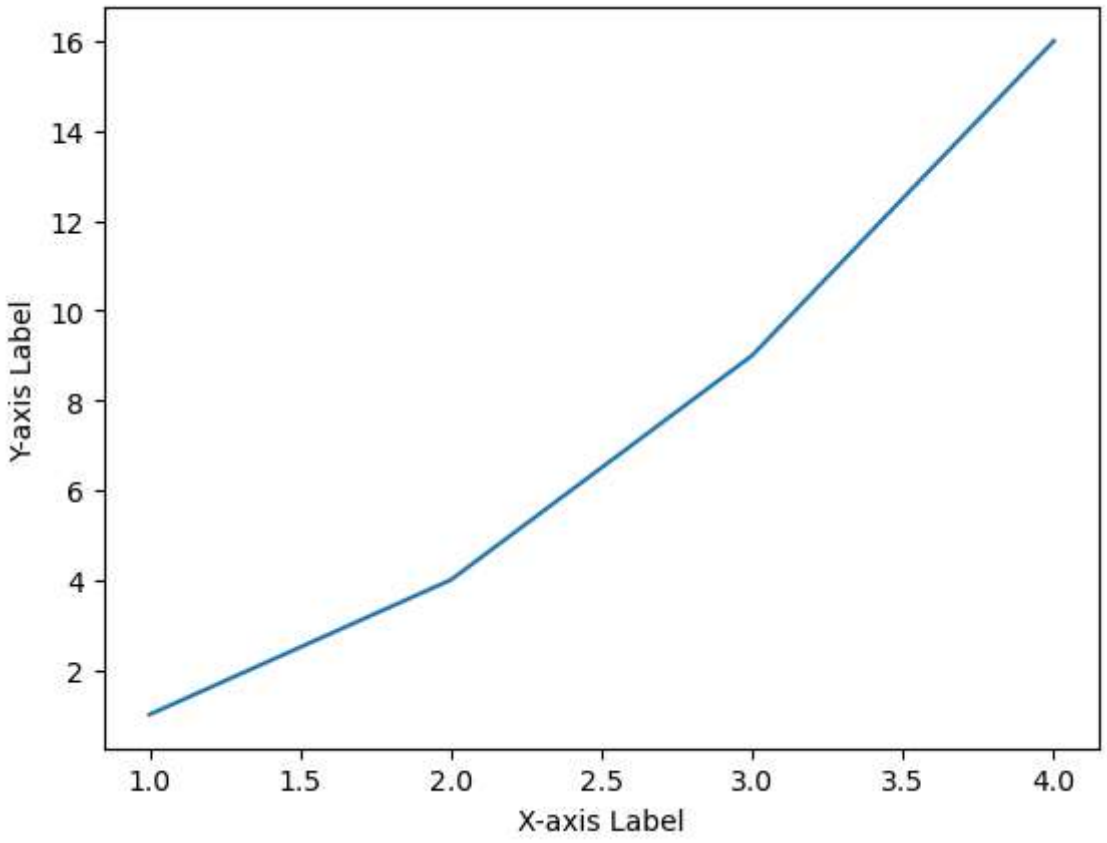
In [2]:
```
import matplotlib.pyplot as plt
import numpy as np

x = np.linspace(0, 10, 100)
y = np.sin(x)
plt.plot(x, y)
plt.show()
```



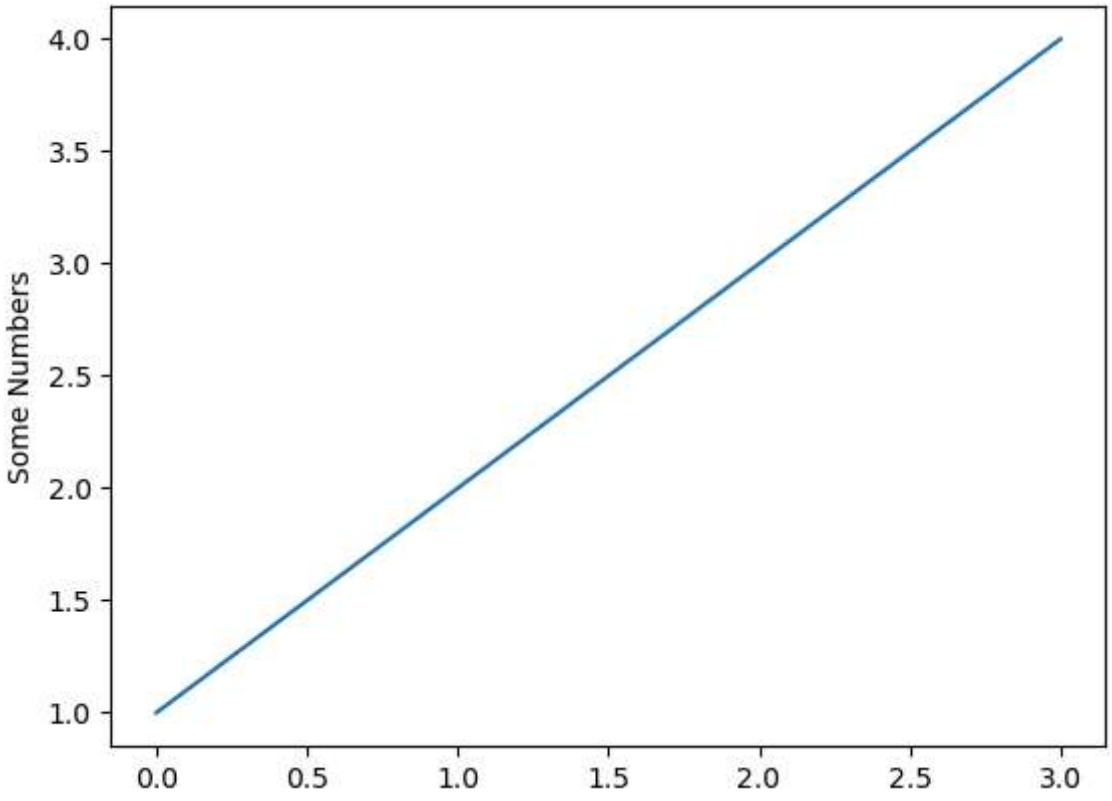
In [3]:
```
import matplotlib.pyplot as plt
import numpy as np

x = np.array([1, 2, 3, 4])
y = np.array([10, 20, 25, 30])
plt.plot(x, y)
plt.title("Simple Plot")
plt.show()
```



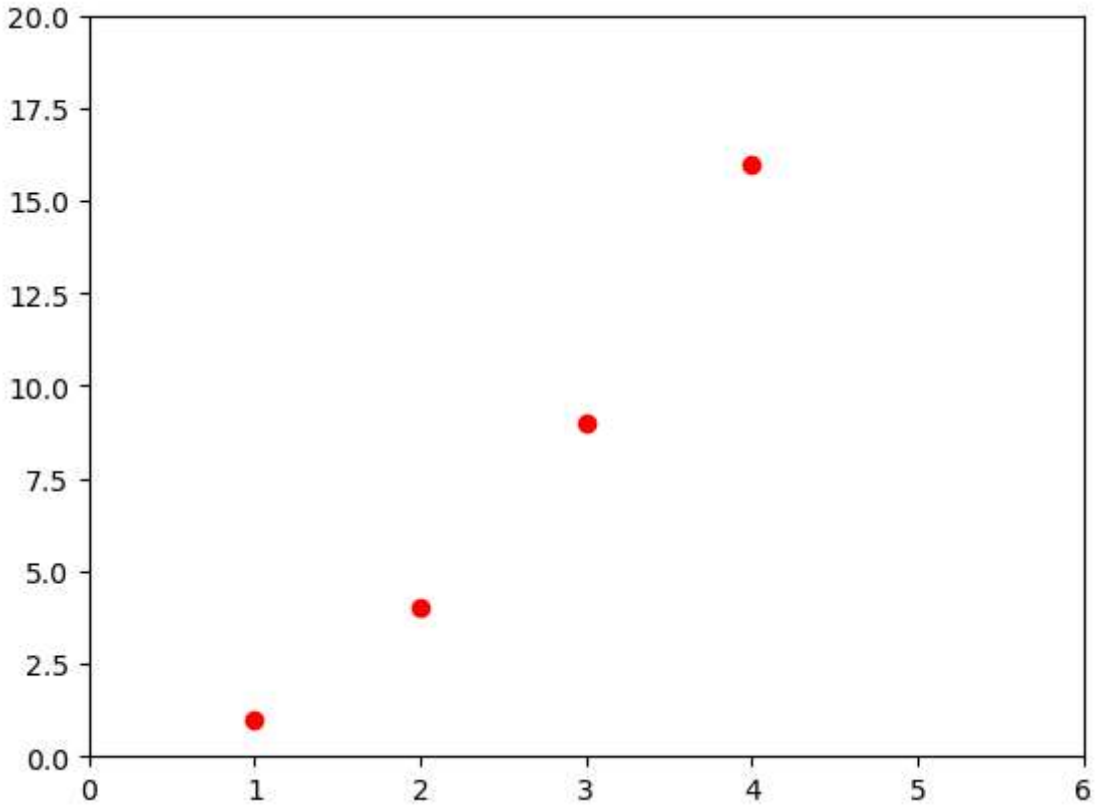
In [4]:
```
import matplotlib.pyplot as plt
import numpy as np

x = np.array([1, 2, 3, 4])
y = np.array([1, 4, 9, 16])
plt.plot(x, y)
plt.xlabel("X-axis Label")
plt.ylabel("Y-axis Label")
plt.show()
```



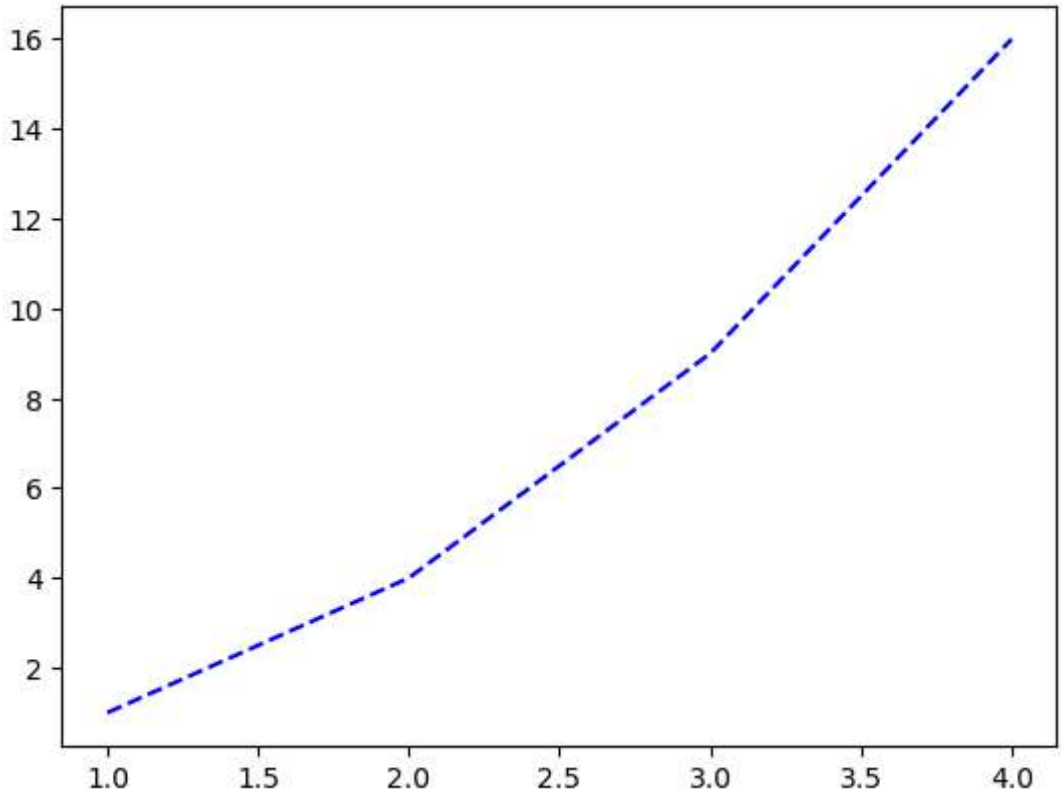
In [5]:
```
import matplotlib.pyplot as plt

plt.plot([1, 2, 3, 4])
plt.ylabel('Some Numbers')
plt.show()
```



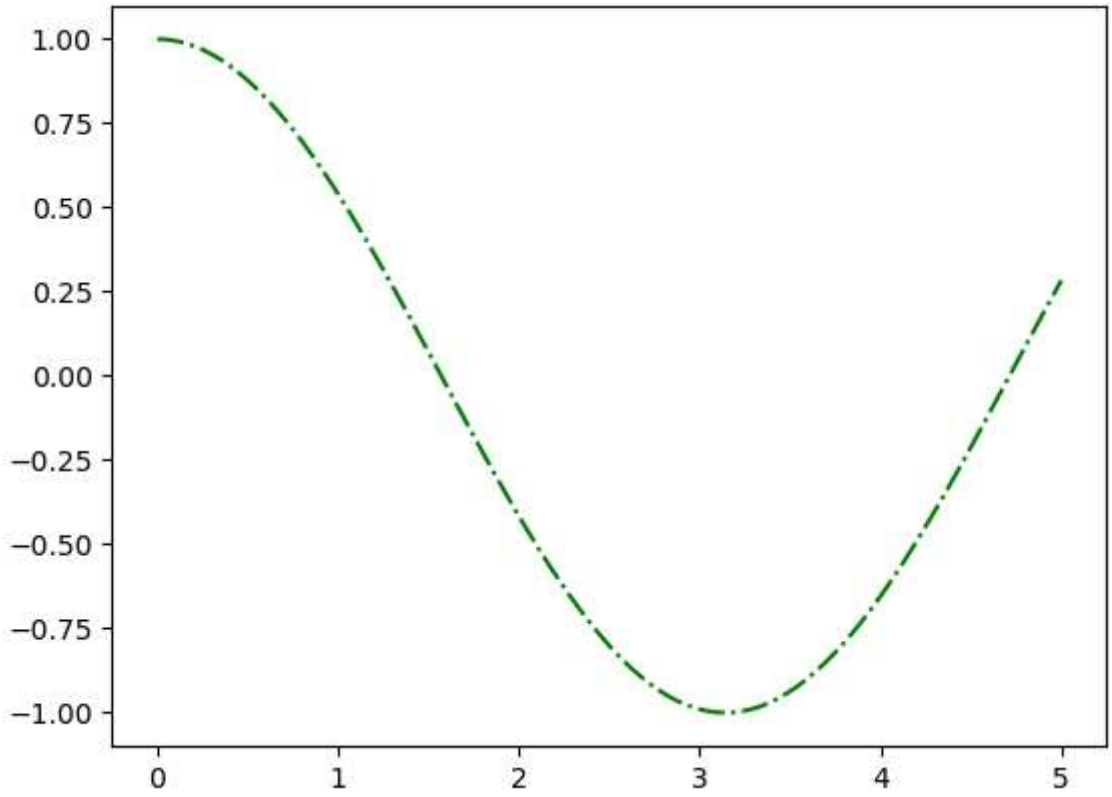
In [6]:
```
import matplotlib.pyplot as plt

x = [1, 2, 3, 4]
y = [1, 4, 9, 16]
plt.plot(x, y, 'ro')
plt.axis([0, 6, 0, 20])
plt.show()
```



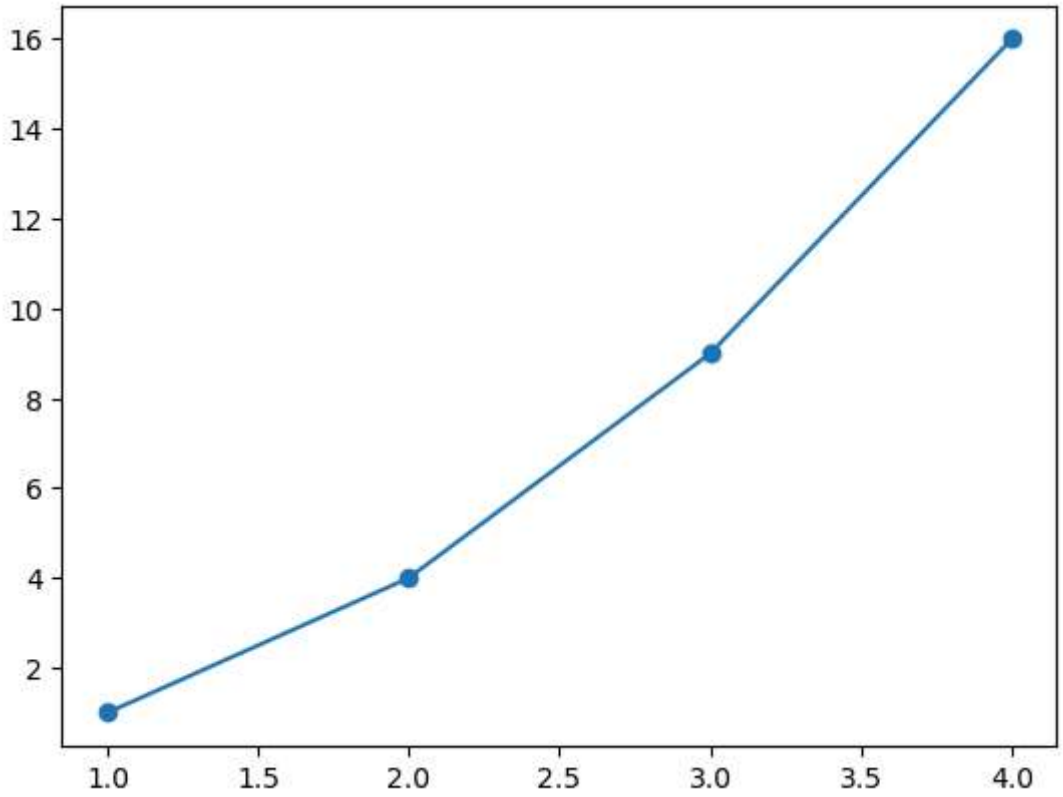
In [7]:
```
import matplotlib.pyplot as plt
import numpy as np

x = np.array([1, 2, 3, 4])
y = np.array([1, 4, 9, 16])
plt.plot(x, y, 'b--')
plt.show()
```



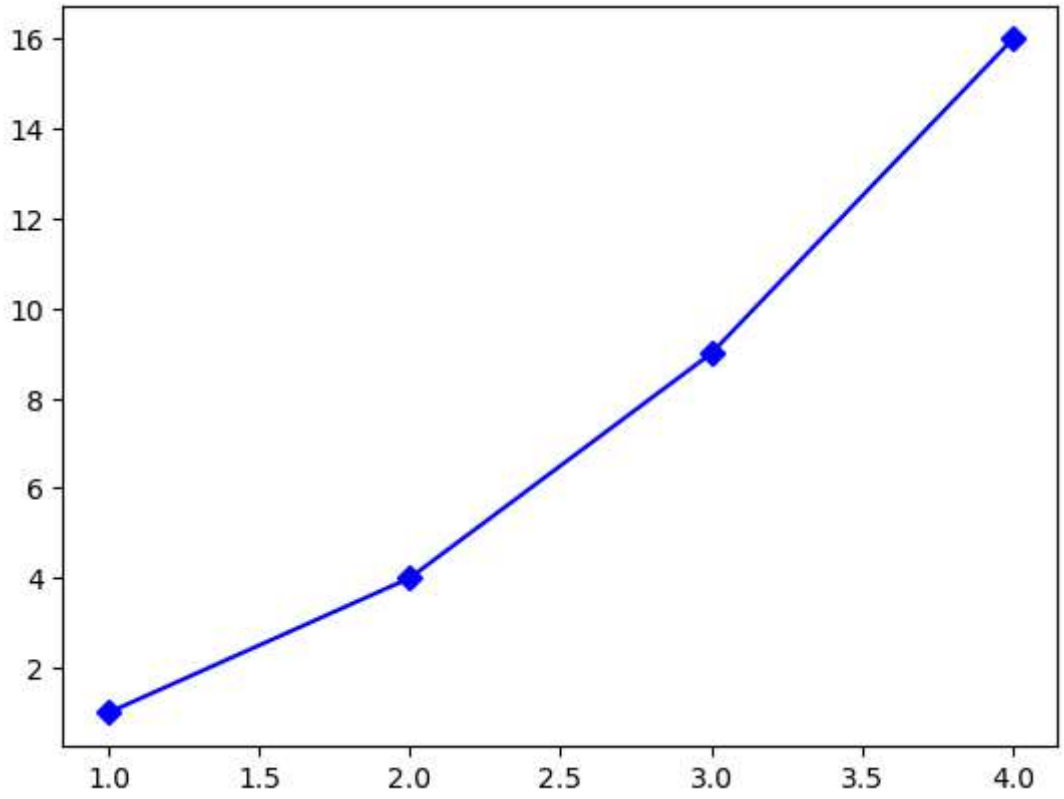
In [8]:
```
import matplotlib.pyplot as plt
import numpy as np

x = np.linspace(0, 5, 100)
y = np.cos(x)
plt.plot(x, y, 'g-.')
plt.show()
```



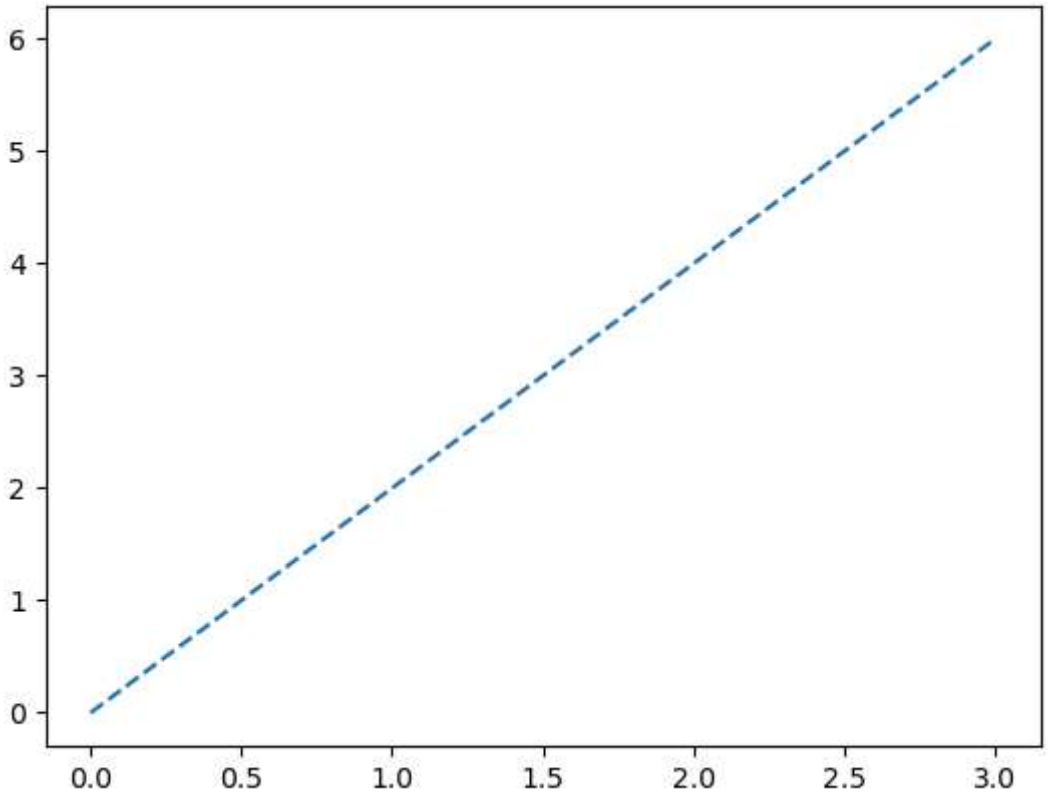
In [9]:
```
import matplotlib.pyplot as plt
import numpy as np

x = np.array([1, 2, 3, 4])
y = np.array([1, 4, 9, 16])
plt.plot(x, y, marker='o')
plt.show()
```



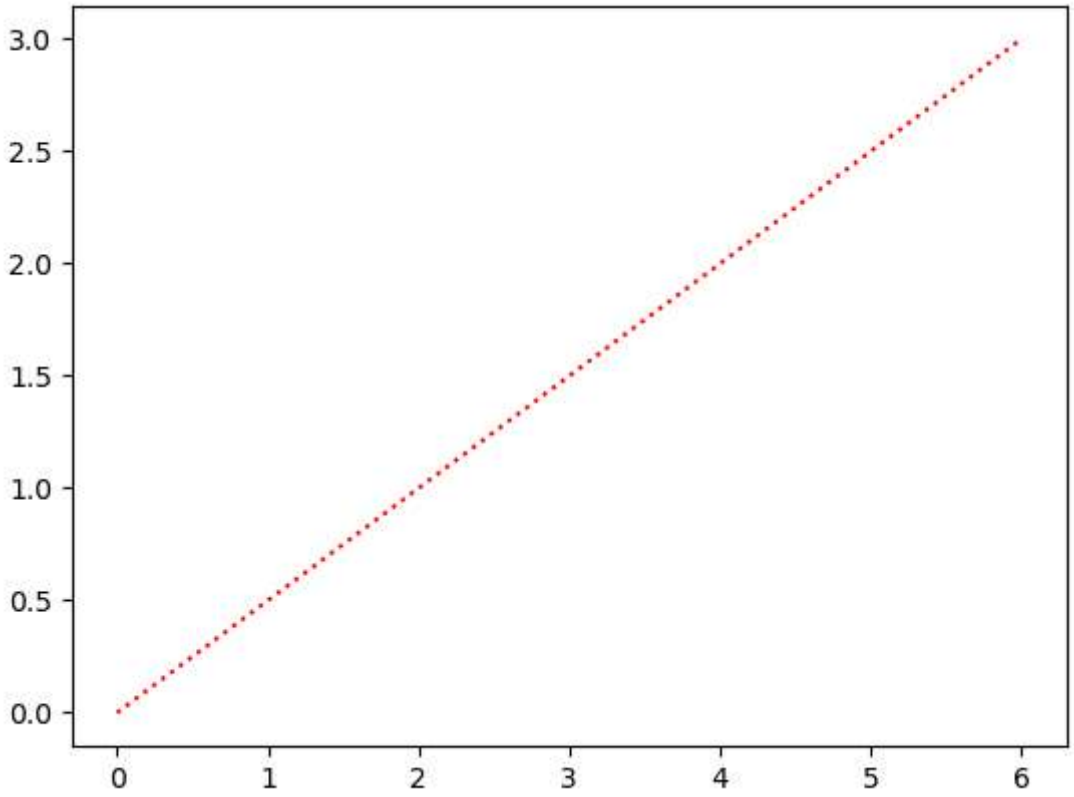
In [10]:
```
import matplotlib.pyplot as plt
import numpy as np

x = np.array([1, 2, 3, 4])
y = np.array([1, 4, 9, 16])
plt.plot(x, y, 'b', marker='D')
plt.show()
```



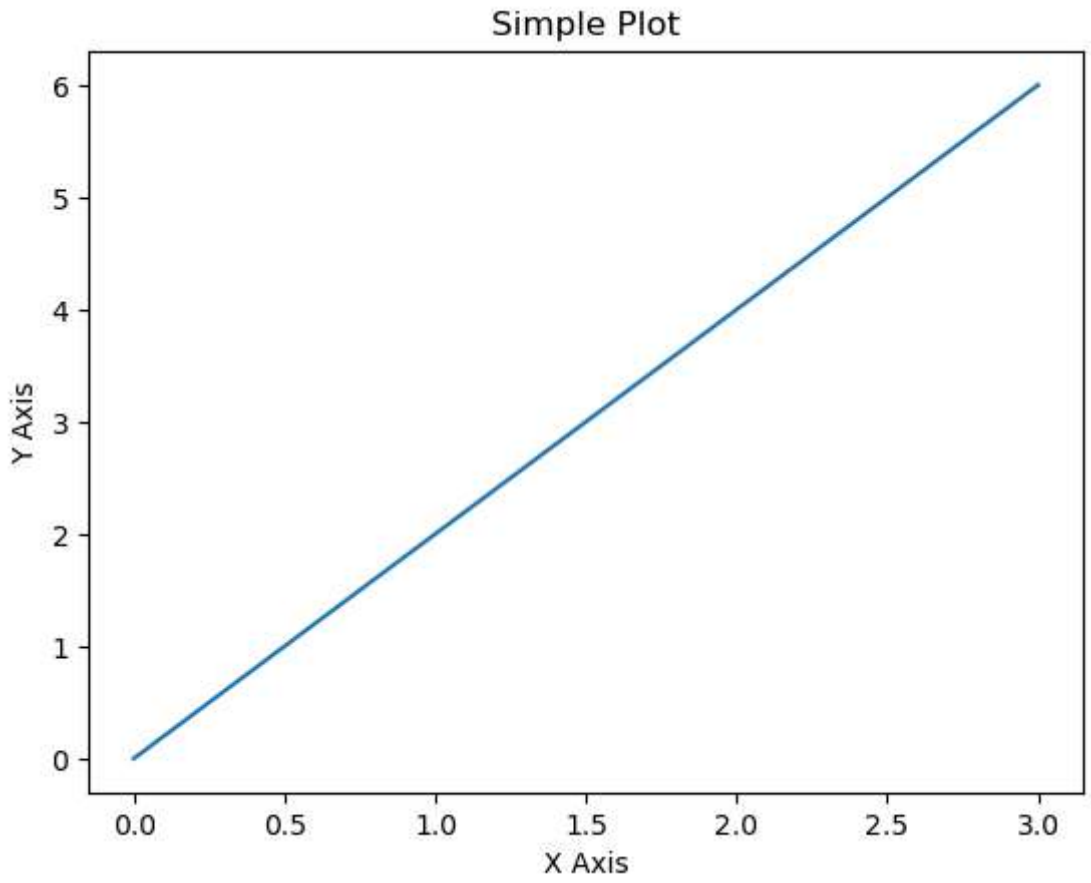
In [11]:
```
import matplotlib.pyplot as plt
import numpy as np

x = np.array([0, 1, 2, 3])
y = np.array([0, 2, 4, 6])
plt.plot(x, y, linestyle='dashed')
plt.show()
```



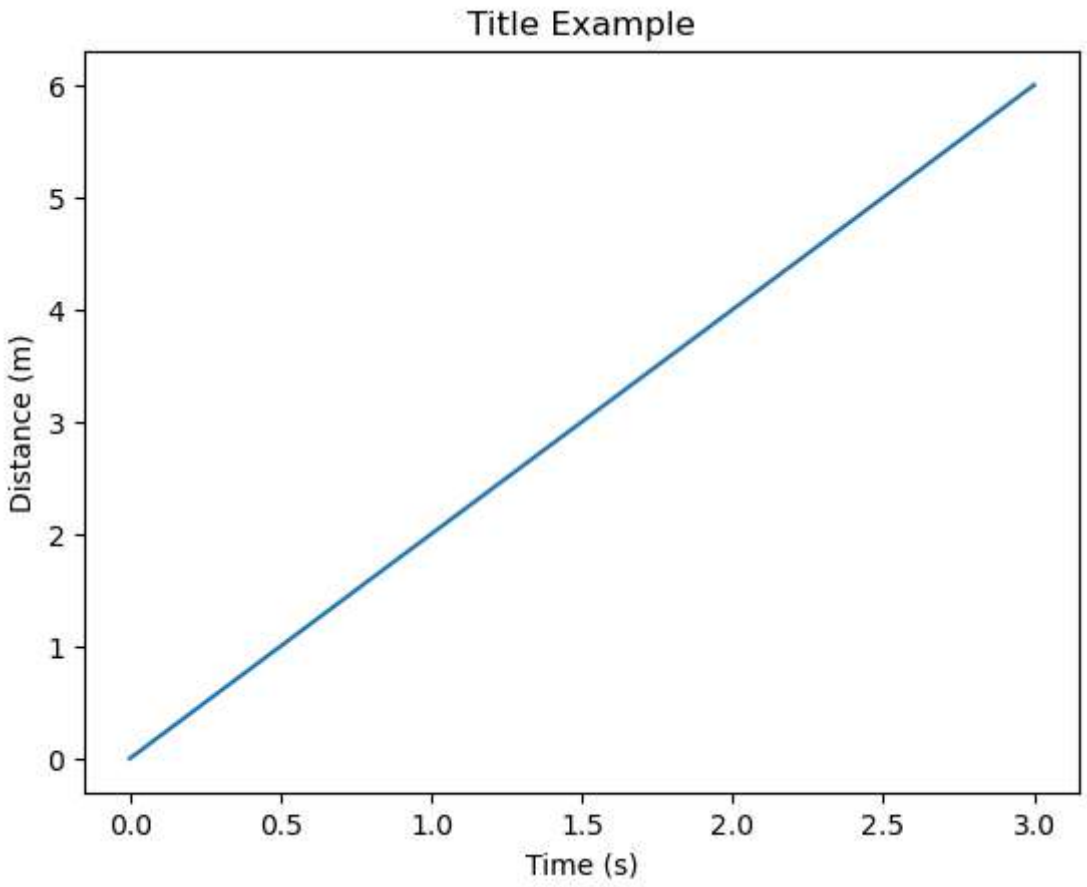
In [12]:
```
import matplotlib.pyplot as plt
import numpy as np

x = np.array([0, 2, 4, 6])
y = np.array([0, 1, 2, 3])
plt.plot(x, y, linestyle='dotted', color='red')
plt.show()
```



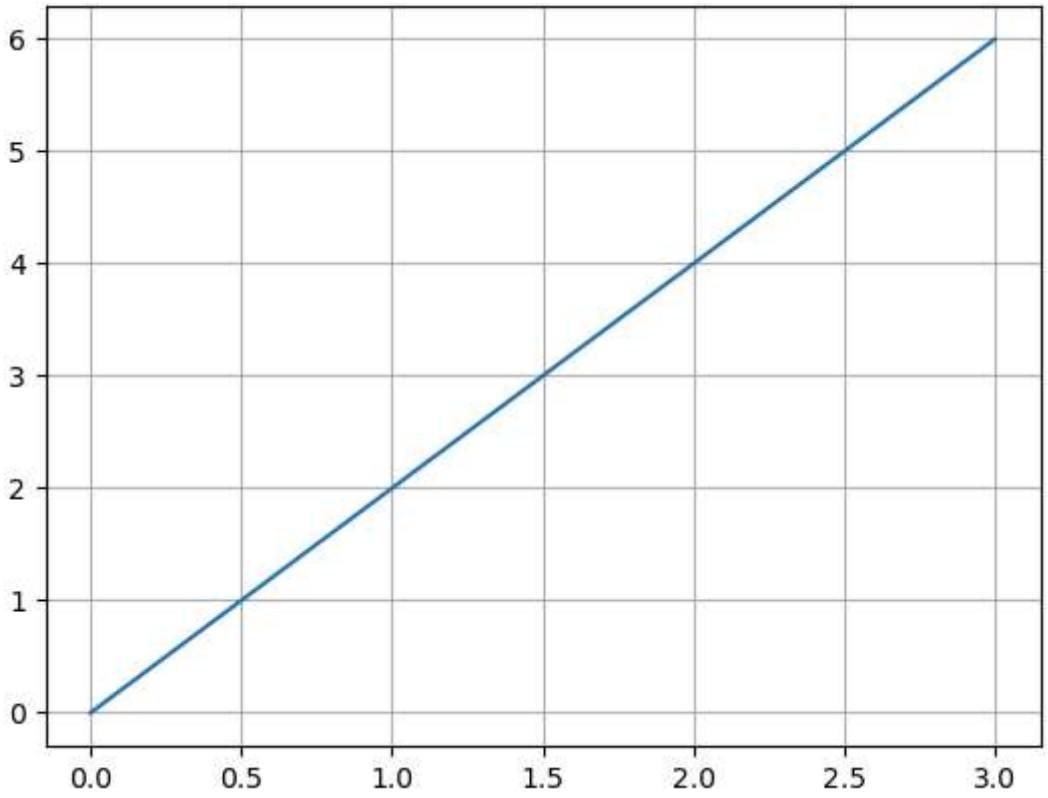
In [13]:
```
import matplotlib.pyplot as plt
import numpy as np

x = np.array([0, 1, 2, 3])
y = np.array([0, 2, 4, 6])
plt.plot(x, y)
plt.xlabel('X Axis')
plt.ylabel('Y Axis')
plt.title('Simple Plot')
plt.show()
```



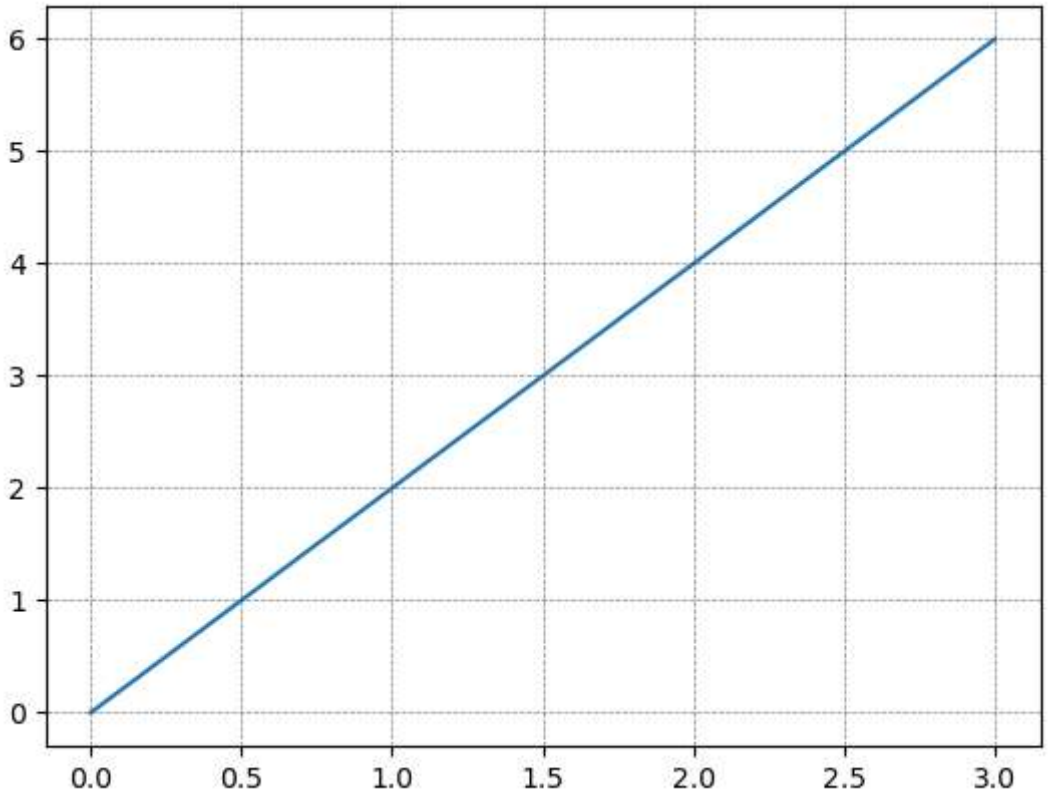
In [14]:
```
import matplotlib.pyplot as plt
import numpy as np

x = np.array([0, 1, 2, 3])
y = np.array([0, 2, 4, 6])
plt.plot(x, y)
plt.title('Title Example')
plt.xlabel('Time (s)')
plt.ylabel('Distance (m)')
plt.show()
```



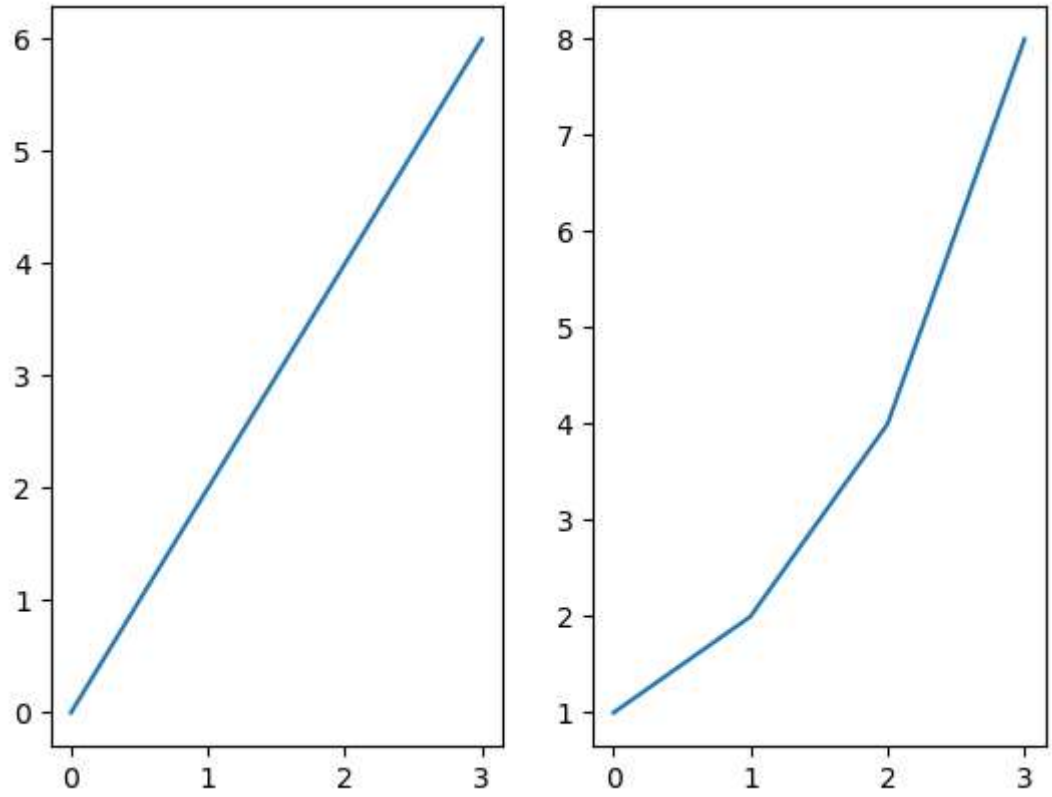
In [15]:
```
import matplotlib.pyplot as plt
import numpy as np

x = np.array([0, 1, 2, 3])
y = np.array([0, 2, 4, 6])
plt.plot(x, y)
plt.grid(True)
plt.show()
```



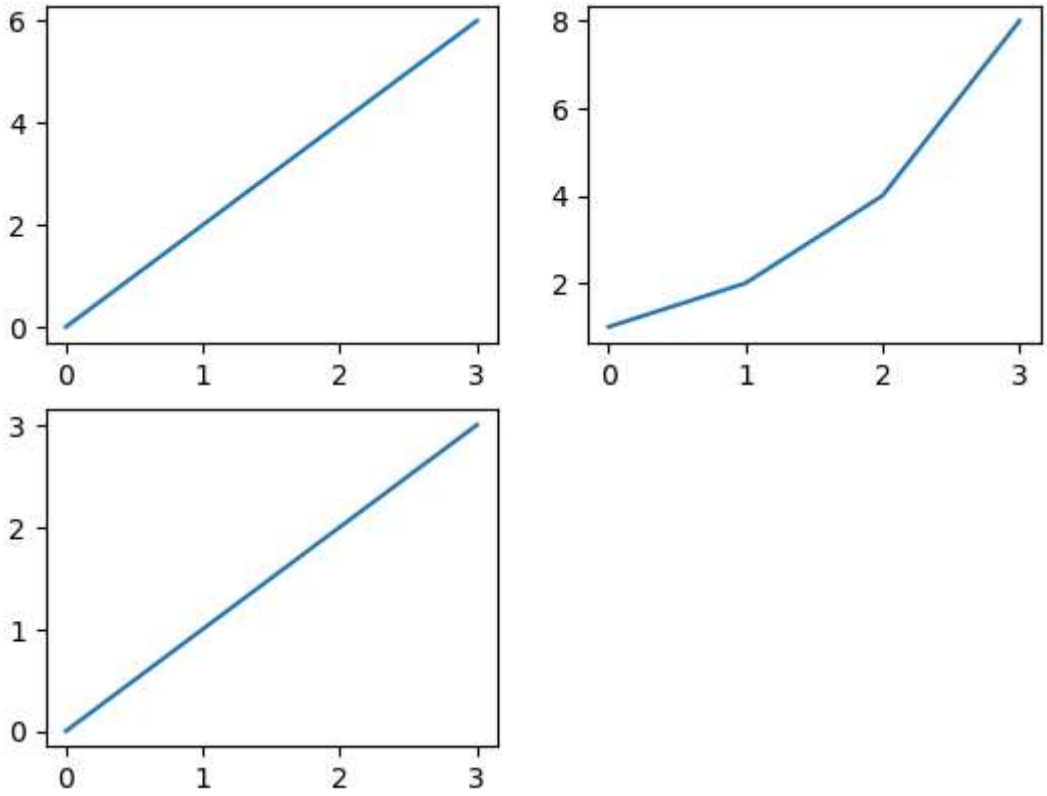
In [16]:
```
import matplotlib.pyplot as plt
import numpy as np

x = np.array([0, 1, 2, 3])
y = np.array([0, 2, 4, 6])
plt.plot(x, y)
plt.grid(color='gray', linestyle='--', linewidth=0.5)
plt.show()
```



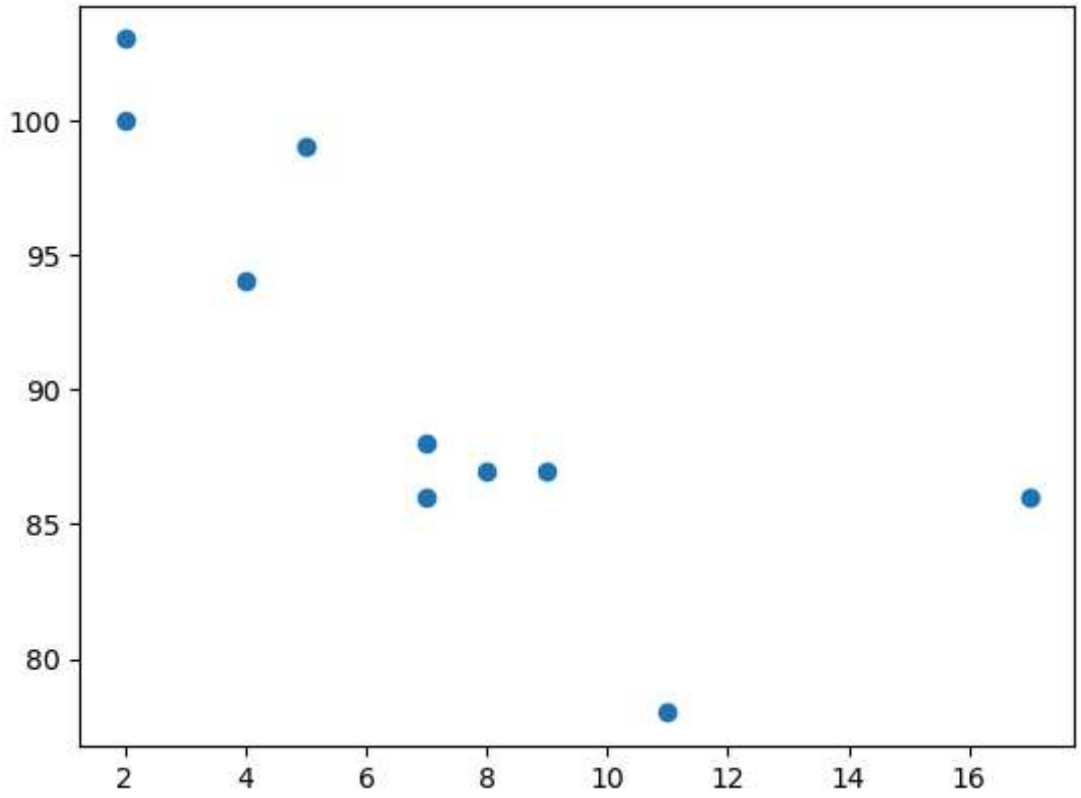
In [17]:
```
import matplotlib.pyplot as plt
import numpy as np

x1 = np.array([0, 1, 2, 3])
y1 = np.array([0, 2, 4, 6])
x2 = np.array([0, 1, 2, 3])
y2 = np.array([1, 2, 4, 8])

plt.subplot(1, 2, 1)
plt.plot(x1, y1)

plt.subplot(1, 2, 2)
plt.plot(x2, y2)

plt.show()
```



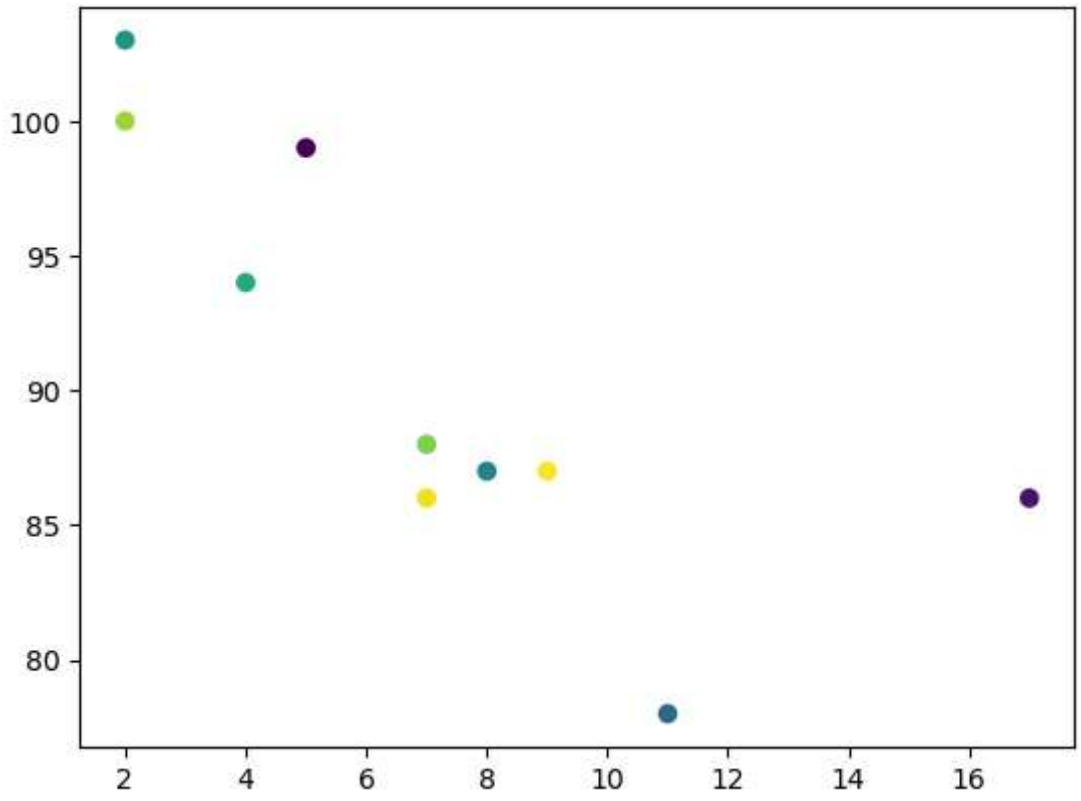
In [18]:
```
import matplotlib.pyplot as plt
import numpy as np

x = np.array([0, 1, 2, 3])
y1 = np.array([0, 2, 4, 6])
y2 = np.array([1, 2, 4, 8])
y3 = np.array([0, 1, 2, 3])

plt.subplot(2, 2, 1)
plt.plot(x, y1)

plt.subplot(2, 2, 2)
plt.plot(x, y2)

plt.subplot(2, 2, 3)
plt.plot(x, y3)

plt.show()
```



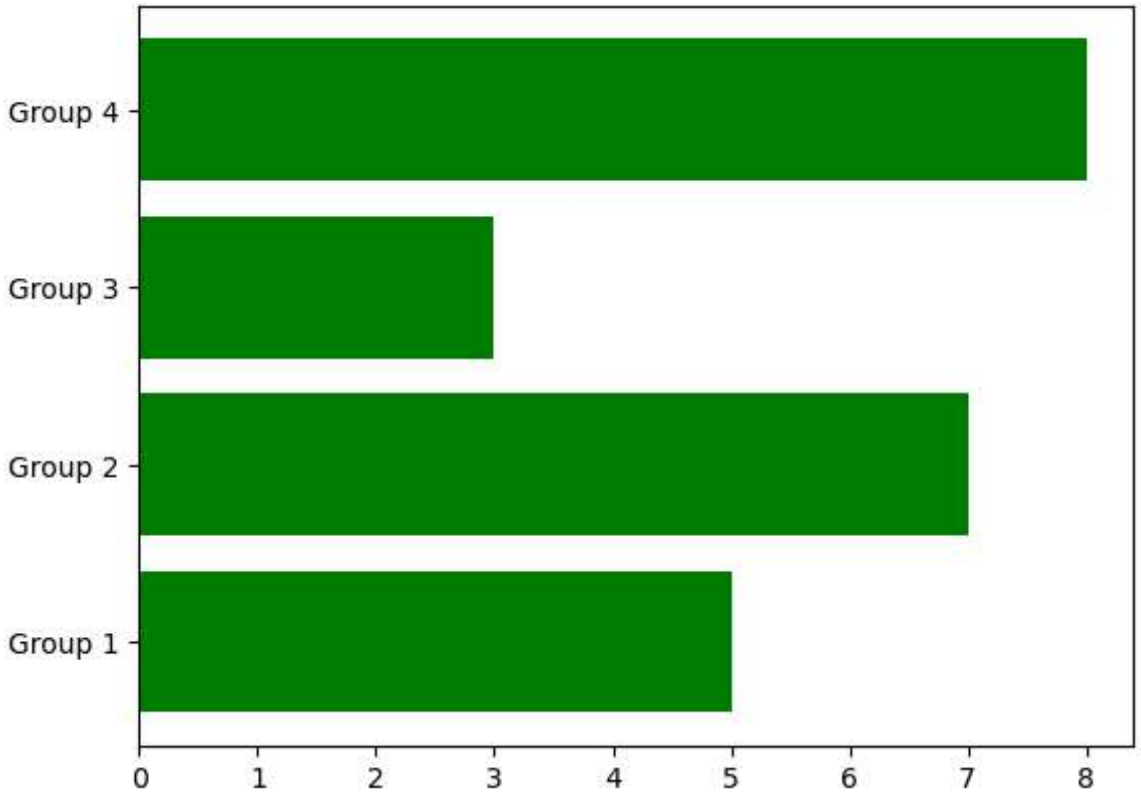
In [19]:
```
import matplotlib.pyplot as plt
import numpy as np

x = np.array([5, 7, 8, 7, 2, 17, 2, 9, 4, 11])
y = np.array([99, 86, 87, 88, 100, 86, 103, 87, 94, 78])

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



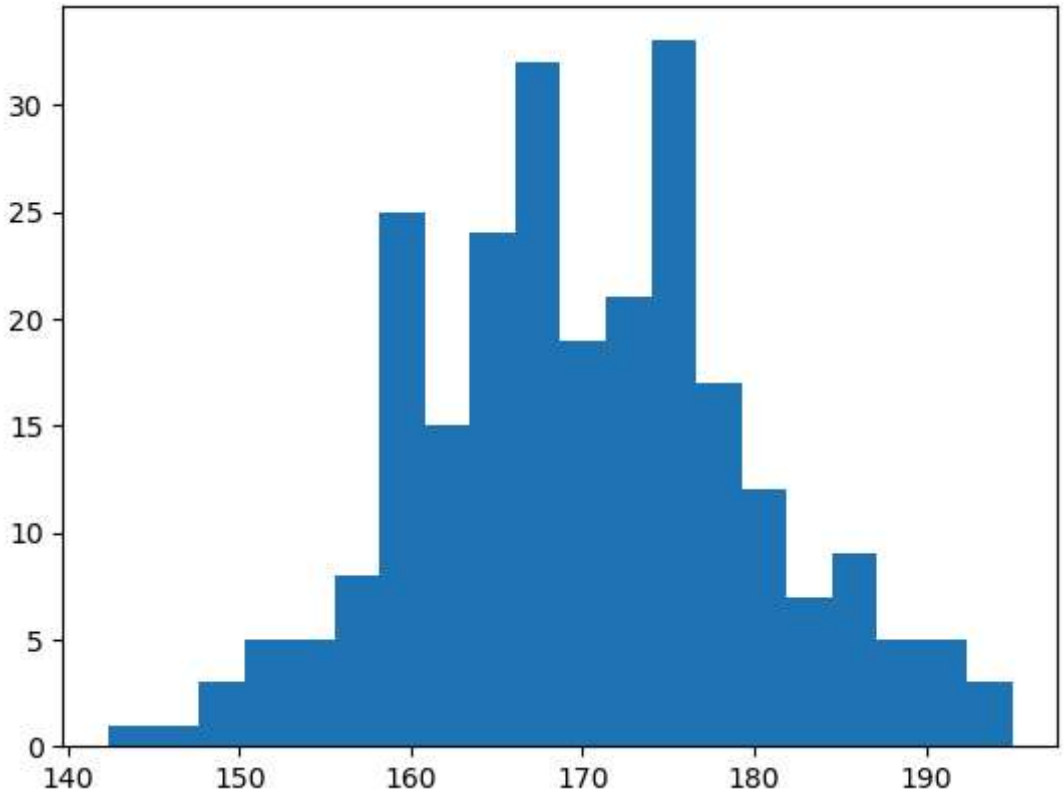
In [20]:
```
import matplotlib.pyplot as plt
import numpy as np

x = np.array([5, 7, 8, 7, 2, 17, 2, 9, 4, 11])
y = np.array([99, 86, 87, 88, 100, 86, 103, 87, 94, 78])

colors = np.random.rand(10)
plt.scatter(x, y, c=colors)
plt.show()
```



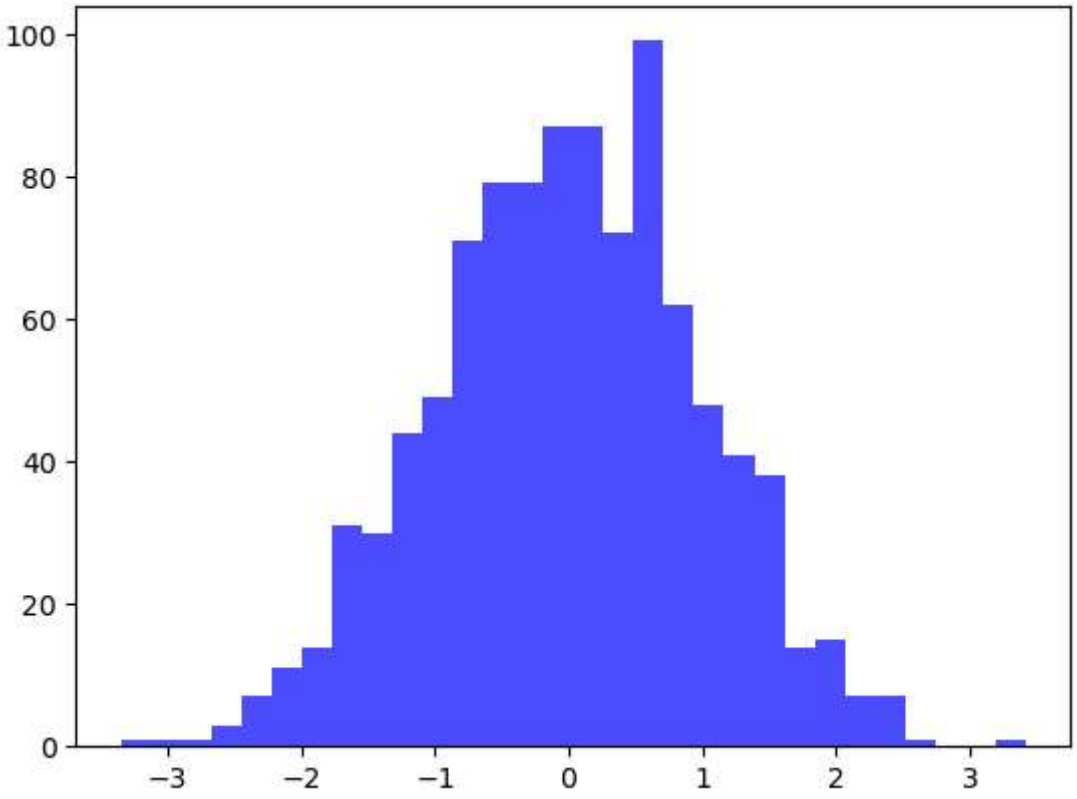
In [21]:
```
import matplotlib.pyplot as plt

x = ['Group 1', 'Group 2', 'Group 3', 'Group 4']
y = [5, 7, 3, 8]
plt.barh(x, y, color='green')
plt.show()
```



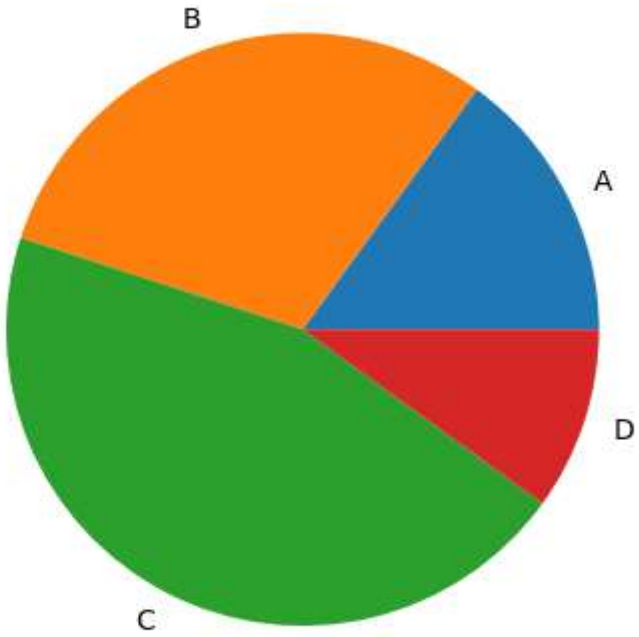
In [22]:
```
import matplotlib.pyplot as plt
import numpy as np

x = np.random.normal(170, 10, 250)
plt.hist(x, bins=20)
plt.show()
```



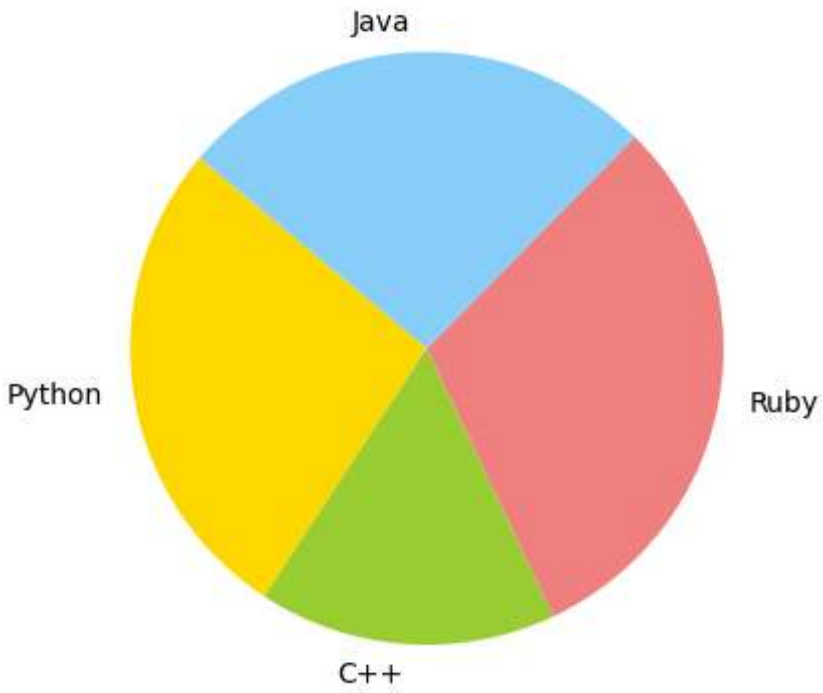
In [23]:
```
import matplotlib.pyplot as plt
import numpy as np

x = np.random.normal(0, 1, 1000)
plt.hist(x, bins=30, color='blue', alpha=0.7)
plt.show()
```



In [24]:
```
import matplotlib.pyplot as plt

labels = ['A', 'B', 'C', 'D']
sizes = [15, 30, 45, 10]
plt.pie(sizes, labels=labels)
plt.show()
```



In [25]:
```
import matplotlib.pyplot as plt

labels = ['Python', 'C++', 'Ruby', 'Java']
sizes = [215, 130, 245, 210]
colors = ['gold', 'yellowgreen', 'lightcoral', 'lightskyblue']

plt.pie(sizes, labels=labels, colors=colors, startangle=140)
plt.show()
```



In [ ]: