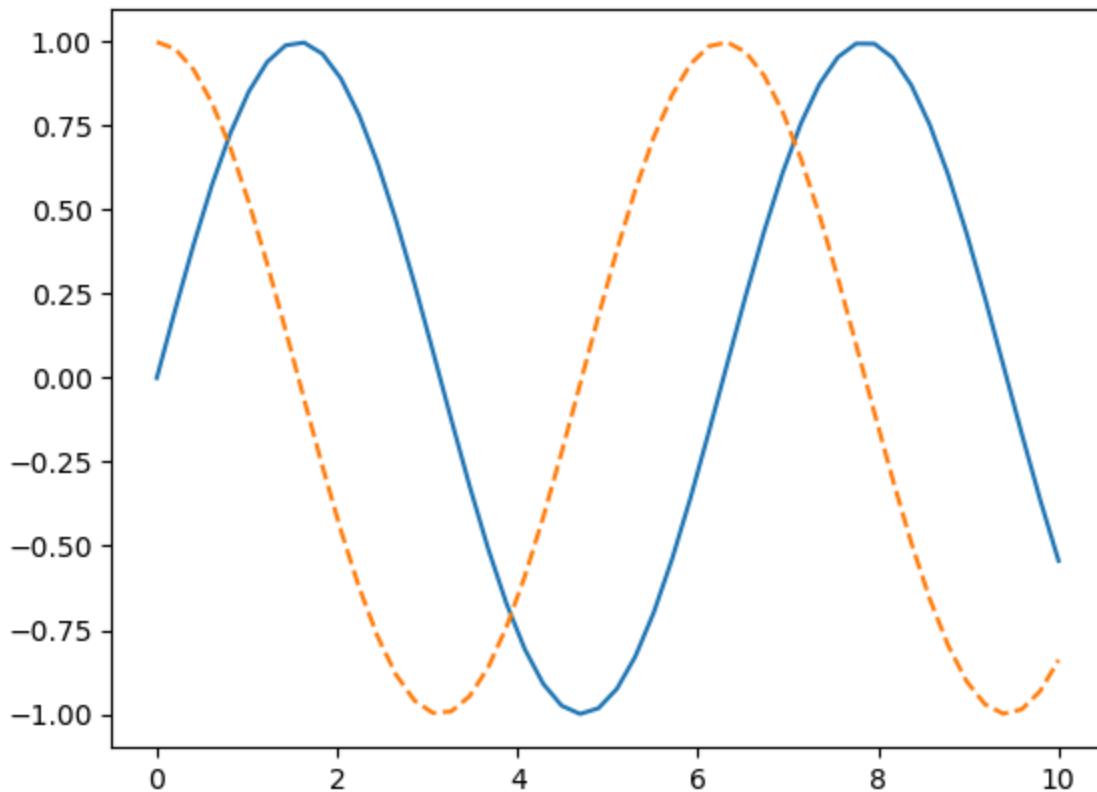


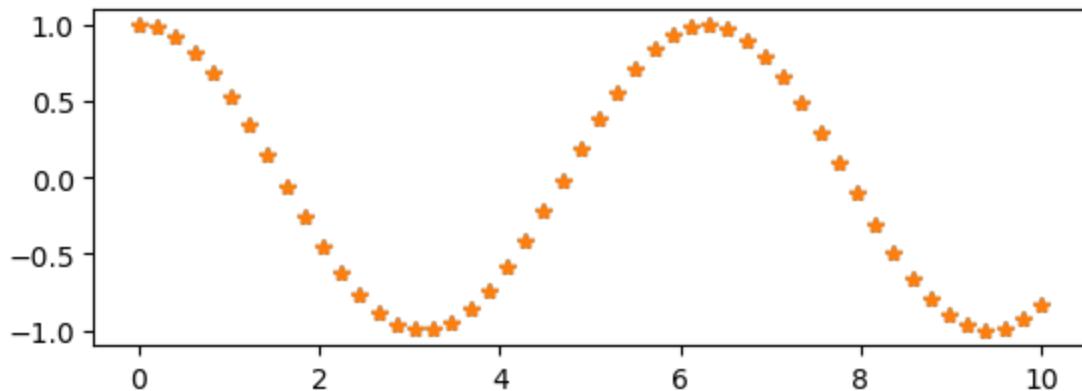
```
In [3]: import numpy as np
```

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

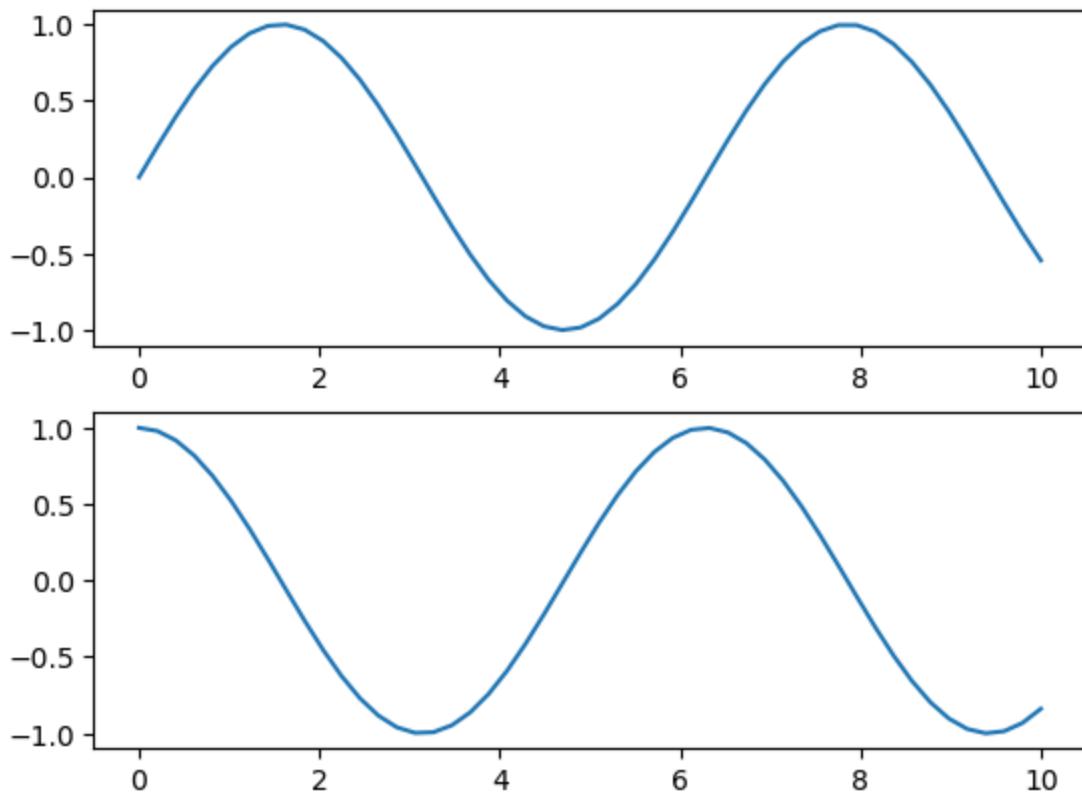
```
In [4]: %matplotlib inline  
x1 = np.linspace(0, 10, 50)  
plt.plot(x1, np.sin(x1), '-')  
plt.plot(x1, np.cos(x1), '--')  
plt.show()
```

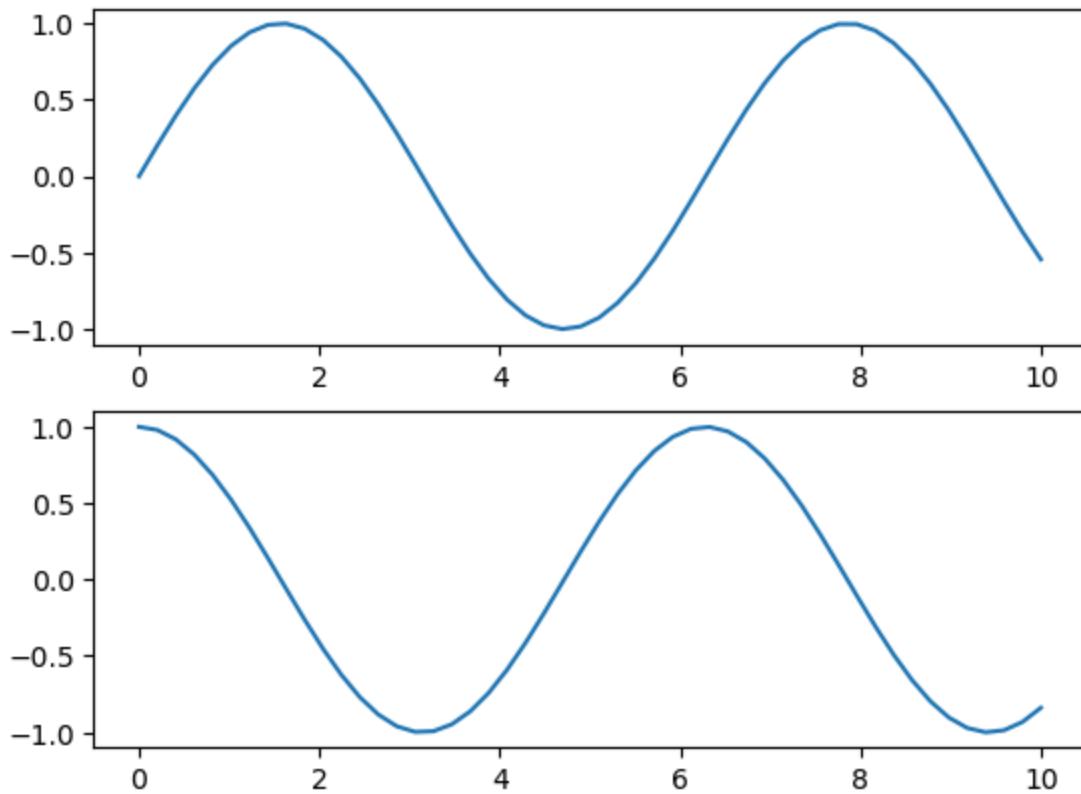


```
In [7]: plt.subplot(2, 1, 1)  
plt.plot(x1, np.cos(x1), '*')  
plt.show()
```



```
In [9]: plt.figure()
plt.subplot(2, 1, 1)
plt.plot(x1, np.sin(x1))
plt.subplot(2, 1, 2)
plt.plot(x1, np.cos(x1));
plt.show()
```





```
In [10]: print(plt.gcf())
```

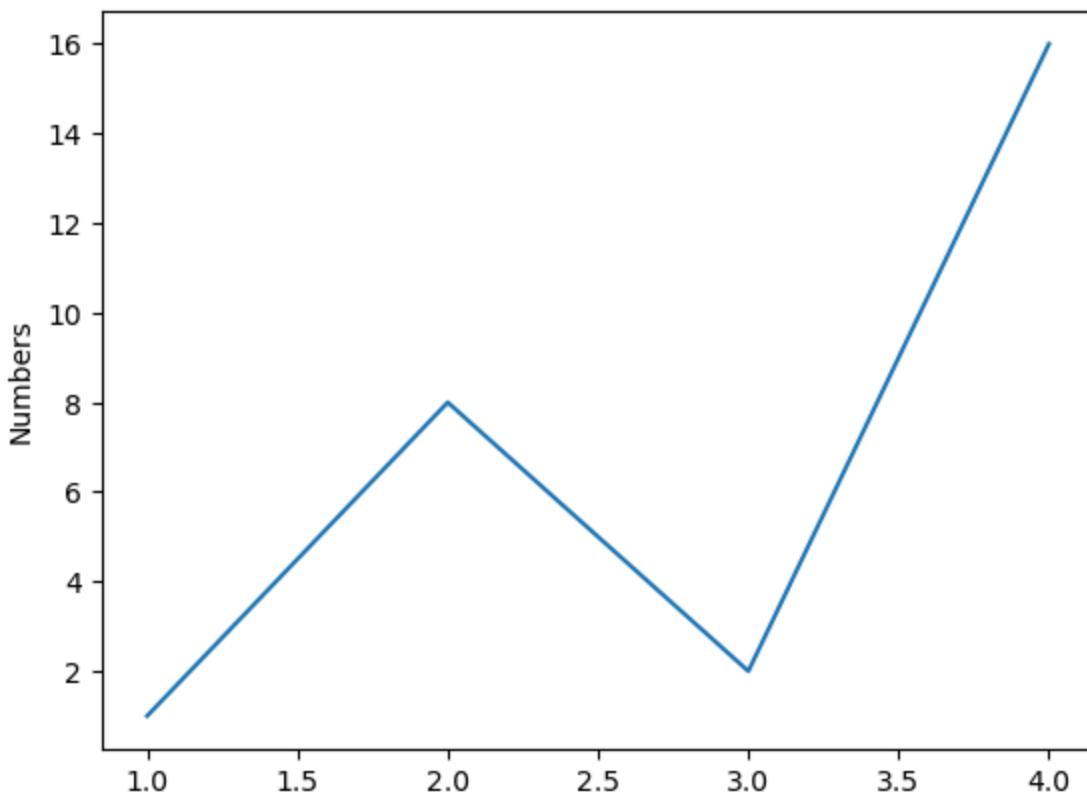
```
Figure(640x480)
```

```
In [11]: print(plt.gca())
```

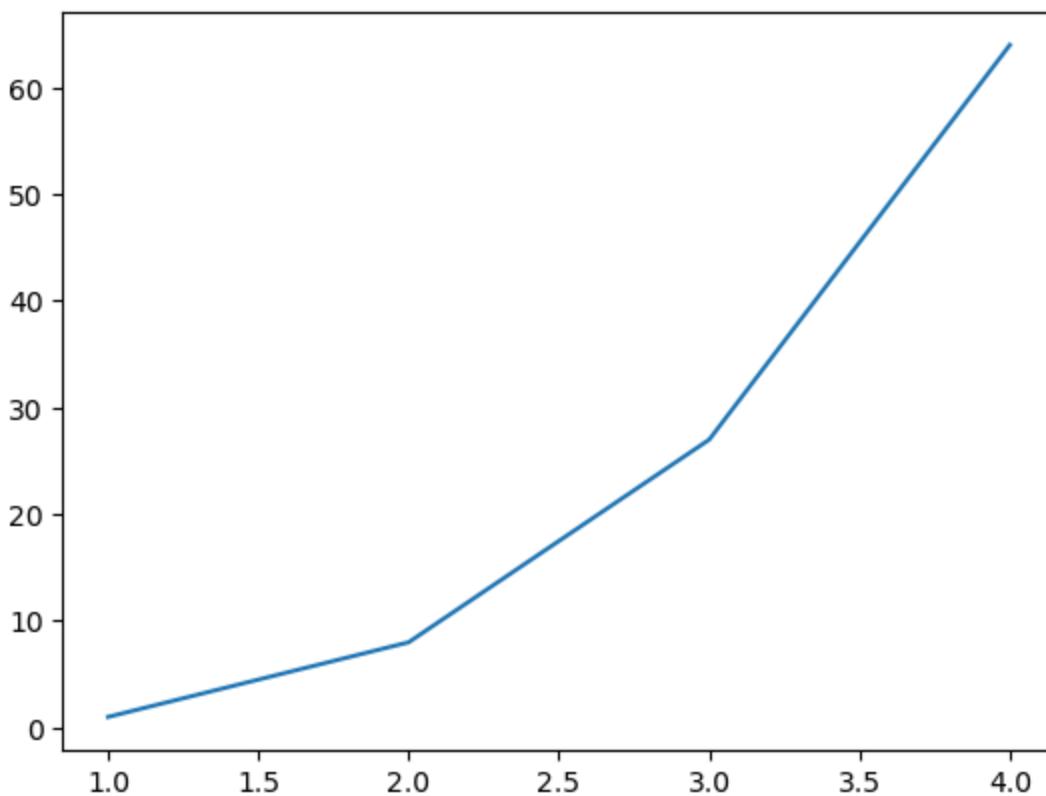
```
Axes(0.125,0.11;0.775x0.77)
```

VISUALISATION WITH PYPLOT

```
In [12]: plt.plot([1,2,3,4], [1,8,2,16])
plt.ylabel('Numbers')
plt.show()
```



```
In [13]: import matplotlib.pyplot as plt  
plt.plot([1, 2, 3, 4], [1, 8, 27, 64])  
plt.show()
```



```
In [14]: x = np.linspace(0, 2, 100)

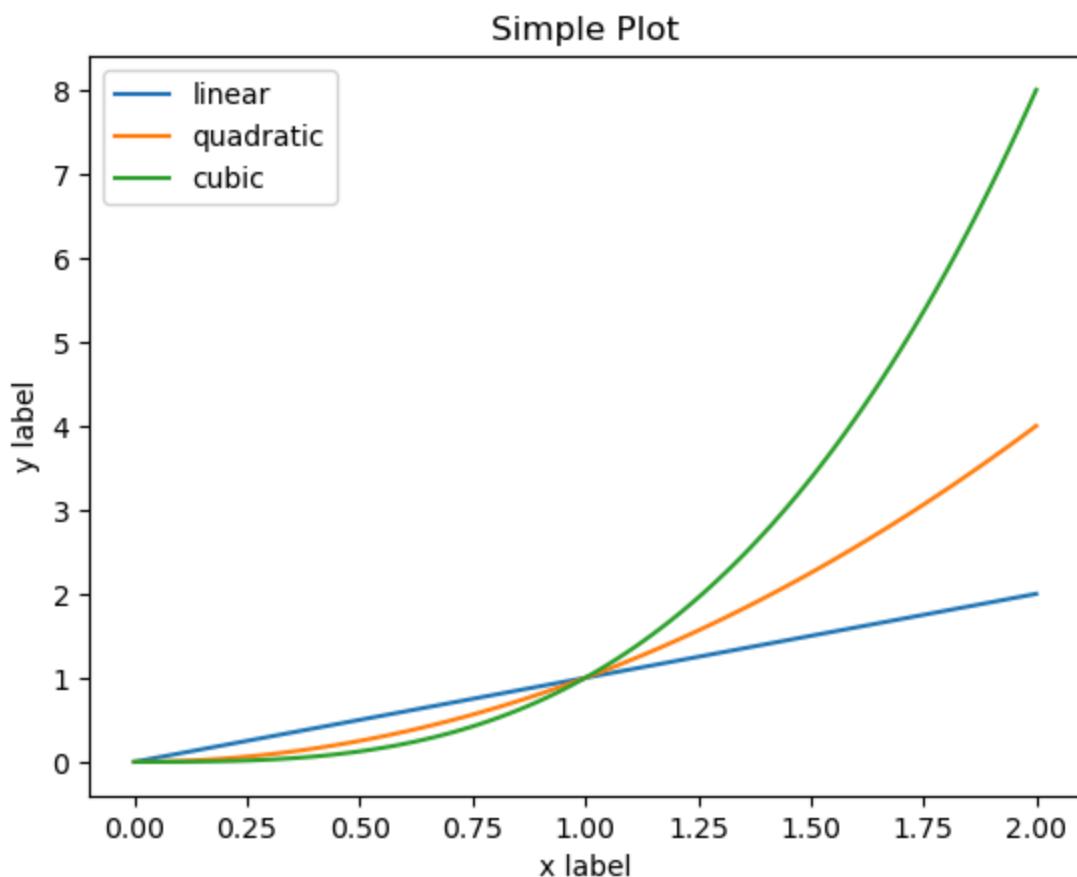
plt.plot(x, x, label='linear')
plt.plot(x, x**2, label='quadratic')
plt.plot(x, x**3, label='cubic')

plt.xlabel('x label')
plt.ylabel('y label')

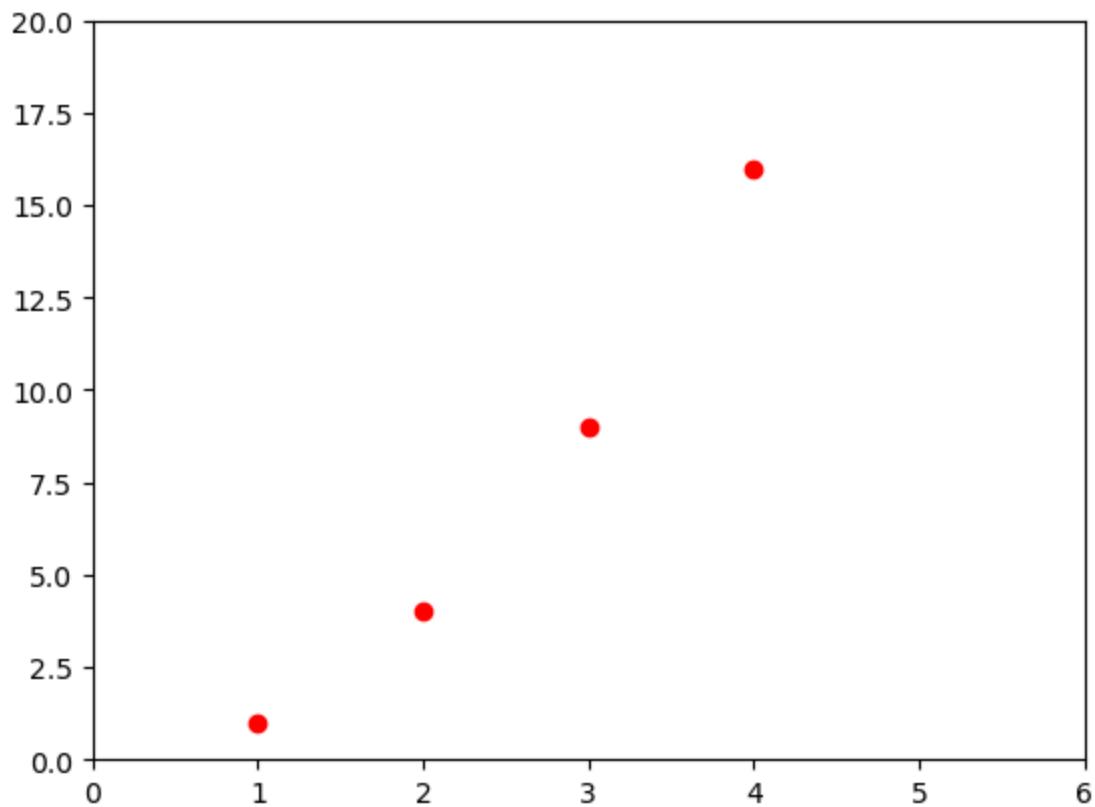
plt.title("Simple Plot")

plt.legend()

plt.show()
```



```
In [15]: plt.plot([1, 2, 3, 4], [1, 4, 9, 16], 'ro')
plt.axis([0, 6, 0, 20])
plt.show()
```



In []: