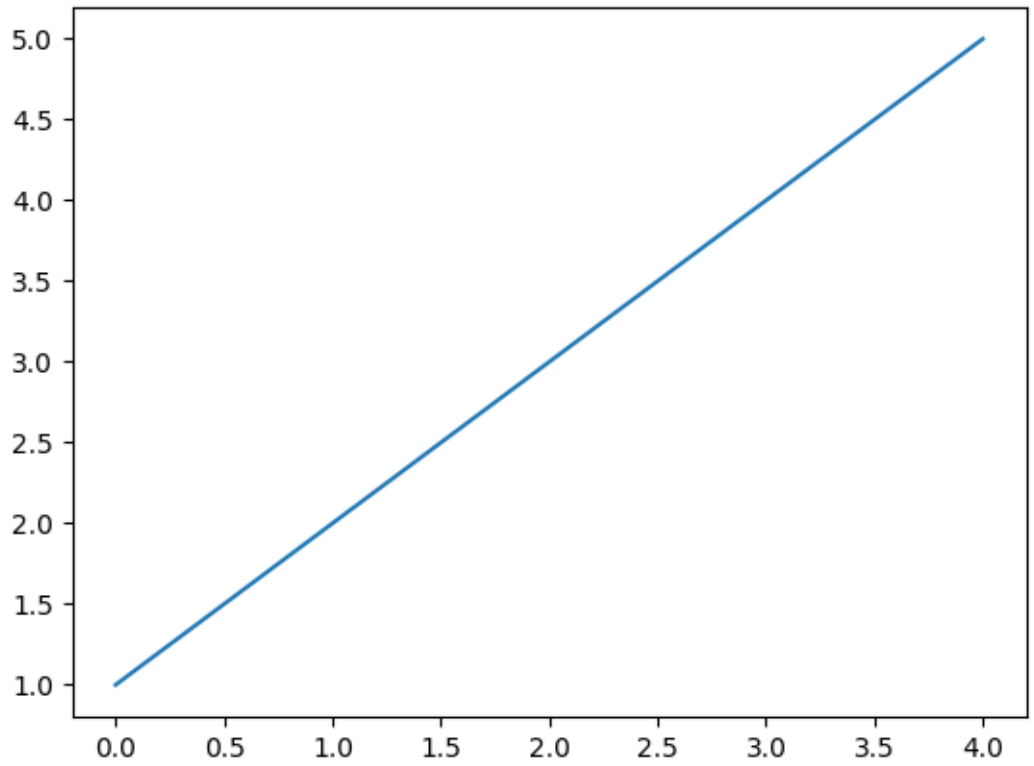
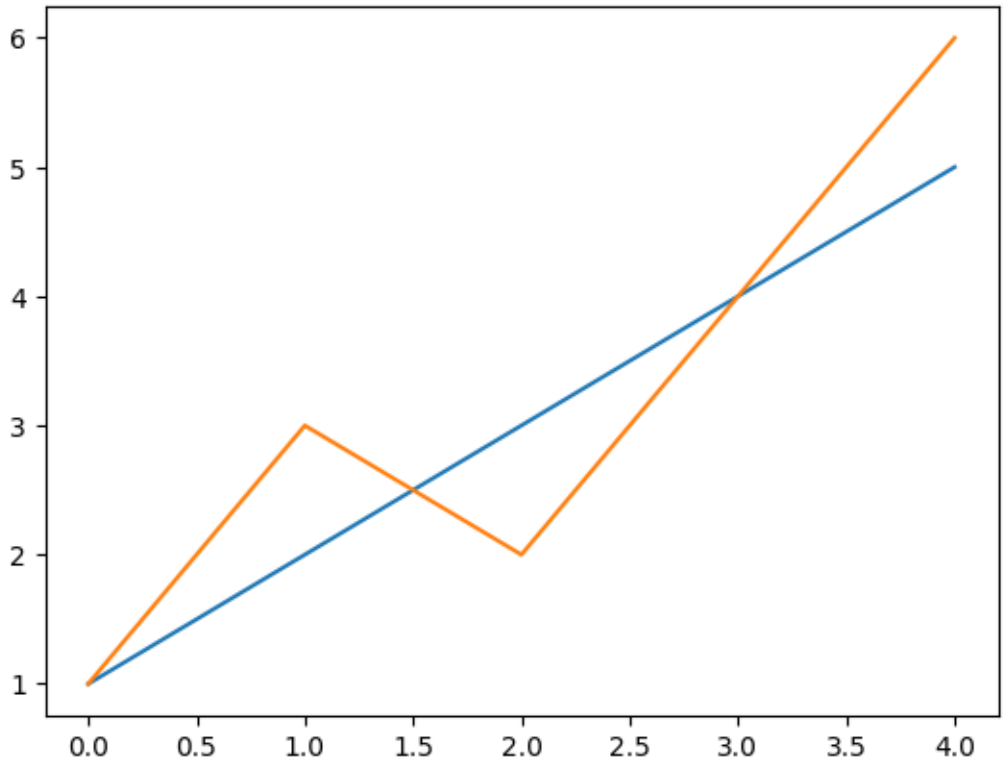
a

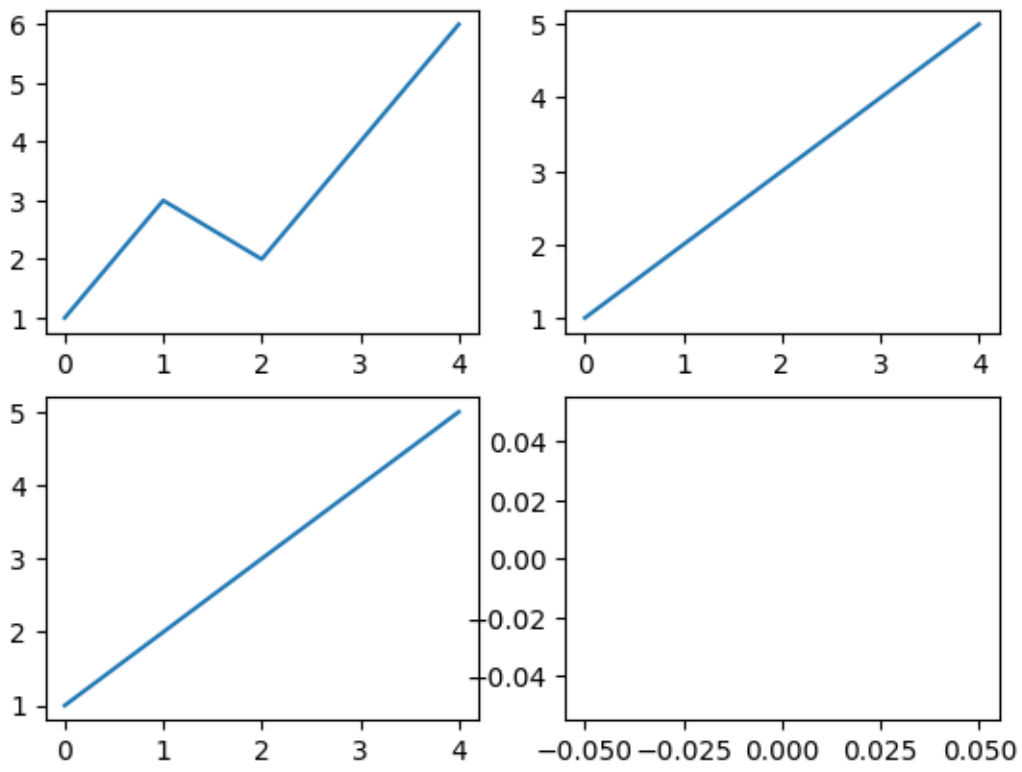
2025 年 2 月 25 日

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

data = np.array([1,2,3,4,5])
fig = plt.figure()
ax = fig.add_subplot(111)    # 表示在画布上绘制 1 行，1 列中的第一个位置绘制坐标轴
ax.plot(data)
plt.show()
```

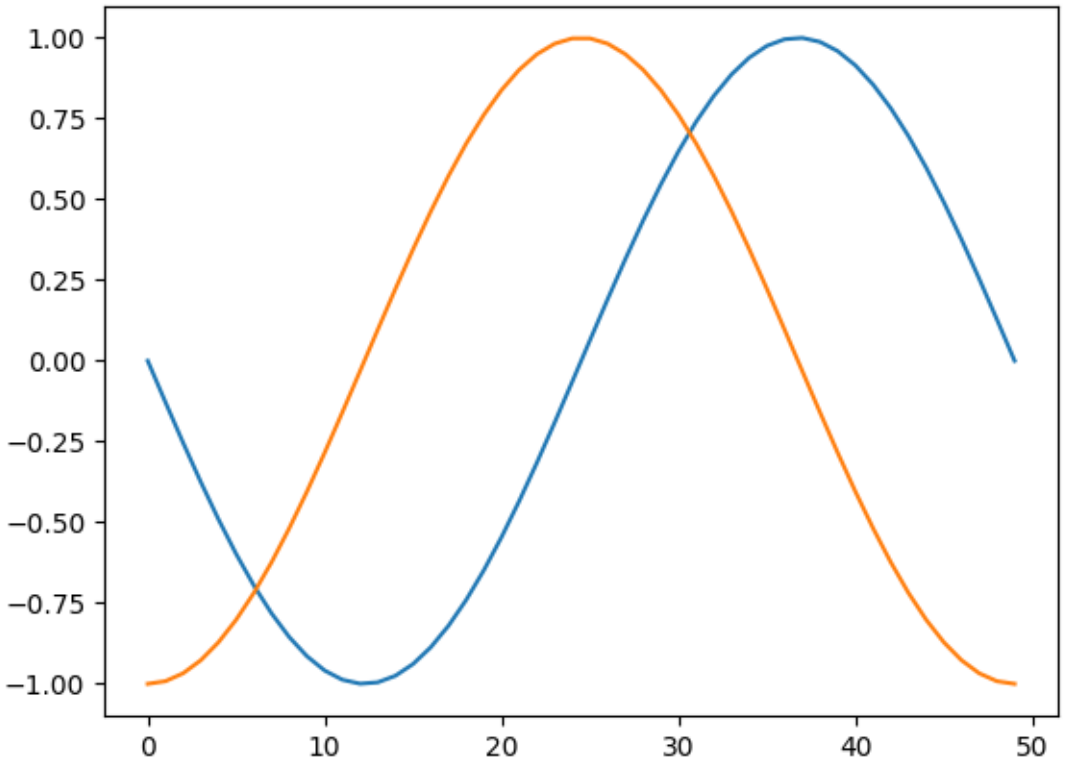


[1]:
```
import numpy as np
from matplotlib import pyplot as plt

data = np.array([1,2,3,4,5])
plt.plot(data)

data1 = np.array([1,3,2,4,6])
plt.plot(data1)



fig = plt.figure()
ax1 = fig.add_subplot(221)
ax1.plot(data1)
ax2 = fig.add_subplot(222)
ax2.plot(data)
ax3 = fig.add_subplot(223)
ax3.plot(data)
ax4 = fig.add_subplot(224)
ax4.plot()
plt.show()
```

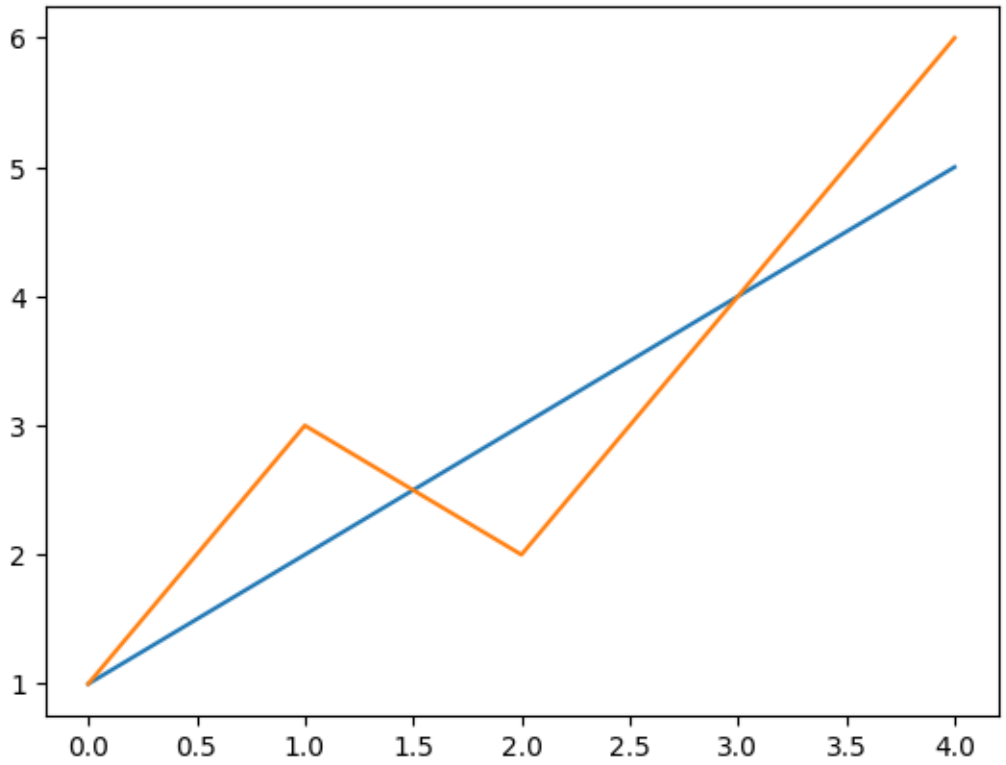

6
5
4
3
2
1
0.0
0.5
1.0
1.5
2.0
2.5
3.0
3.5
4.0



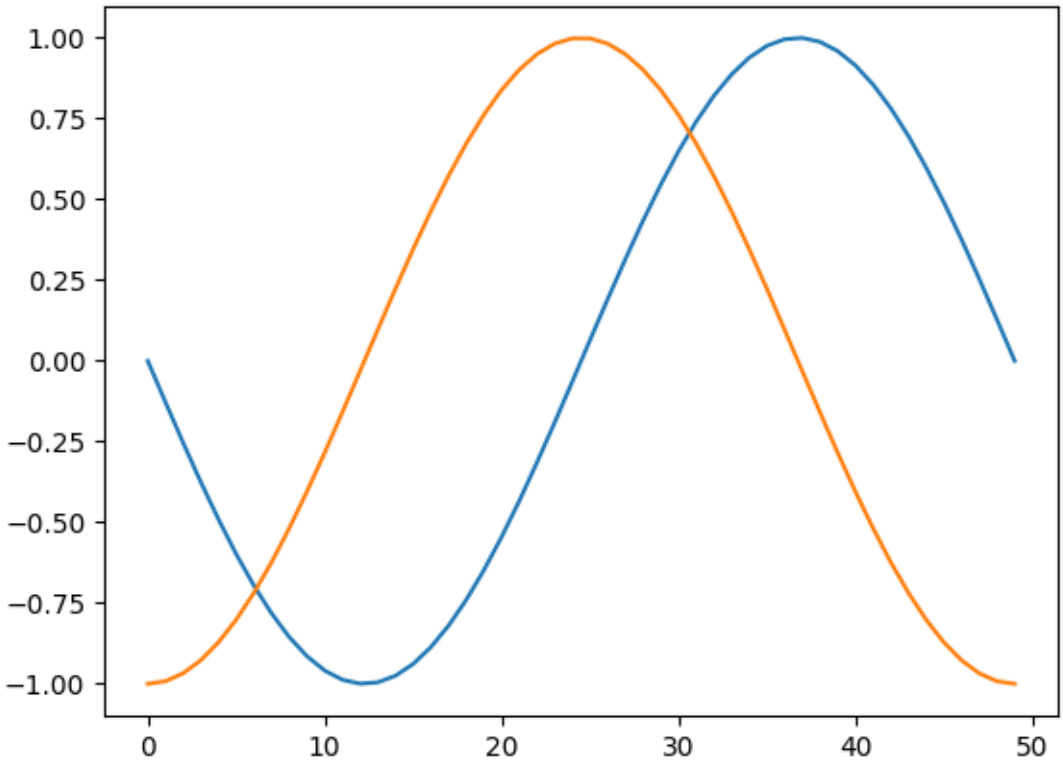
[2]:
```
x = np.linspace(-1 * np.pi,np.pi)
sin = np.sin(x)
cos = np.cos(x)
plt.plot(sin)
plt.plot(cos)
plt.show()
```



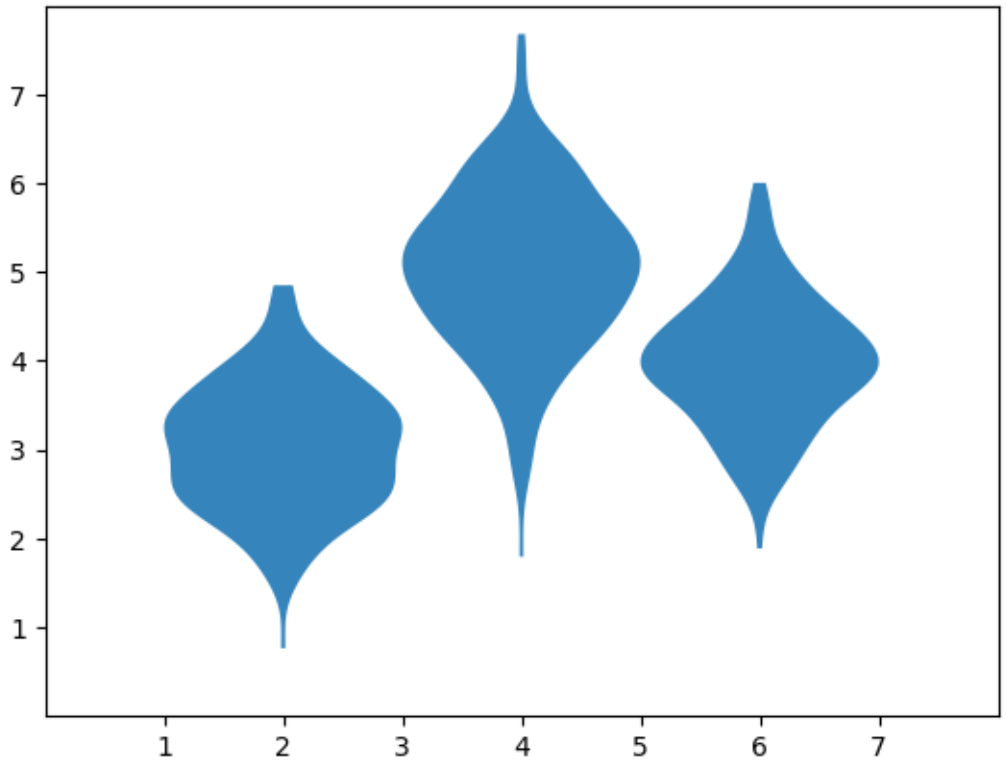
[3]:
```
import numpy as np
from matplotlib import pyplot as plt

data = np.array([1,2,3,4,5])
plt.plot(data)

data1 = np.array([1,3,2,4,6])
plt.plot(data1)

plt.show()
```



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

data = np.linspace(-1 * np.pi,np.pi)

sin = np.sin(data)
cos = np.cos(data)

plt.plot(sin)
plt.plot(cos)

plt.show()
```



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

np.random.seed(10)
D = np.random.normal((3,5,4),(0.75,1.00,0.75),(200,3))

fig, ax = plt.subplots()
vp = ax.
  ↪violinplot(D,[2,4,6],widths=2,showmeans=False,showmedians=False,showextrema=False)

for body in vp["bodies"]:
    body.set_alpha(0.9)
ax.set(xlim=(0,8),xticks=np.arange(1,8),ylim=(0,8),yticks=np.arange(1,8))
plt.show()
```


7
6
5
4
3
2
1
1
2
3
4
5
6
7