

```
import numpy as np
import matplotlib.pyplot as plt

# 准备一些1000个点,这些点分布在一个平面上

x = np.random.normal(0,1,1000)

y = np.linspace(0,1,1000)

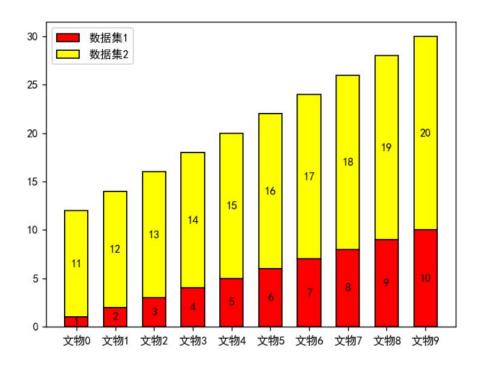
z = 4 * x + 5 * y + 1

fig = plt.figure()

ax = fig.add_subplot(111,projection='3d')

ax.scatter3D(x,y,z,color='blue')

plt.show()
```



```
import numpy as np
import matplotlib.pyplot as plt
gruop_label = ['第一组','第二组','第三组']
gruop_color = ['red','green','yellow']
x = np.arange(1,7,2)
y1 = np.arange(1,7,2)
y2 = np.arange(3,9,2)
y3 = np.arange(5,11,2)
y_list = [y1,y2,y3]
# 用来正常显示中文标签
plt.rcParams['font.sans-serif'] = ['SimHei']
# 用来正常显示负号
plt.rcParams['axes.unicode_minus'] = False
fig, ax = plt.subplots(1,1)
#画三次,每次都在×轴上偏斜一定距离画
width = 0.5
for index in range(len(y_list)):
   bar = ax.bar(x+index*width,y_list[index],edgecolor="black",label=gruop_label[index],wid
   ax.bar_label(bar,label_type="edge")
ax.legend()
plt.show()
```