**Python经典网络协议 第四天作业**

代码：

1. 安装matplotlib模块并测试饼状图

import matplotlib  
from matplotlib import pyplot as plt  
  
print(matplotlib.matplotlib\_fname())  
plt.rcParams['font.sans-serif'] = ['SimHei']  
plt.rcParams['font.family'] = 'sans-serif'  
def mat\_bing(size\_list,name\_list):  
 plt.figure(figsize =(6, 6))  
 patches,label\_text,percent\_test = plt.pie(size\_list,  
 labels=name\_list,  
 labeldistance=1.1,  
 autopct = '%3.1f%%',  
 shadow = False,  
 startangle=90,  
 pctdistance=0.6)  
 for l in label\_text:  
 l.set\_size = 30  
 for p in percent\_test:  
 l.set\_size = 20  
 plt.axis('equal')  
 plt.legend()  
 plt.show()  
  
if \_\_name\_\_ == '\_\_main\_\_':  
 counters = [30,53,12,45]  
 protocols = ['http协议','ftp协议','rdp协议','qq协议']  
 mat\_bing(counters,protocols)

运行结果：

