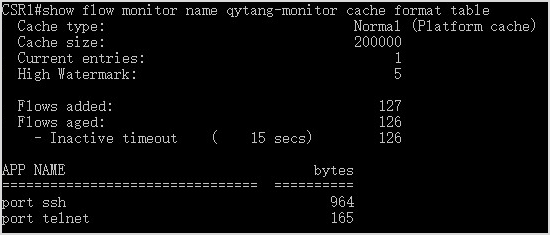
**经典网络协议 第五天作业**

1. **matplotlib饼状图显示netflow信息**

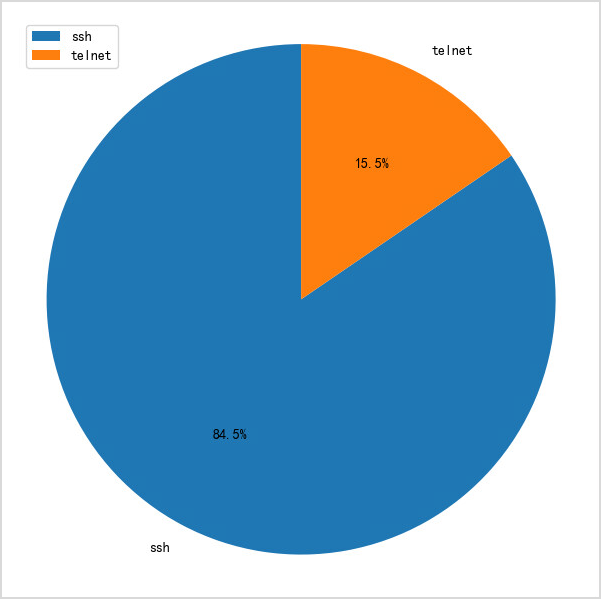
**配置netflow:**

flow record qytang-record  
match application name  
collect counter bytes  
!  
flow monitor qytang-monitor  
record qytang-record  
!  
interface GigabitEthernet1  
ip flow monitor qytang-monitor input

**SSH CLI显示效果:**



**matplotlib饼状图显示效果:**



代码：

import matplotlib  
from matplotlib import pyplot as plt  
from ssh import ssh\_cmd  
import re  
  
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\_\_':  
 ssh = ssh\_cmd('1.1.1.200', 'cisco', 'cisco', ['sho flow monitor name qytang-monitor cache format table'], )  
 netflow\_list = []  
 for i in ssh:  
 ret = re.match(r'(\w+\s+\w+)\s+(\d{3,5})', i).groups()  
 netflow\_list.append(ret)  
  
 counters = [netflow\_list[0][1],netflow\_list[1][1]]  
 protocols = [netflow\_list[0][0],netflow\_list[1][0]]  
 mat\_bing(counters, protocols)

运行结果：

