网络

https://ifconfig.me/查询自己的公网ip

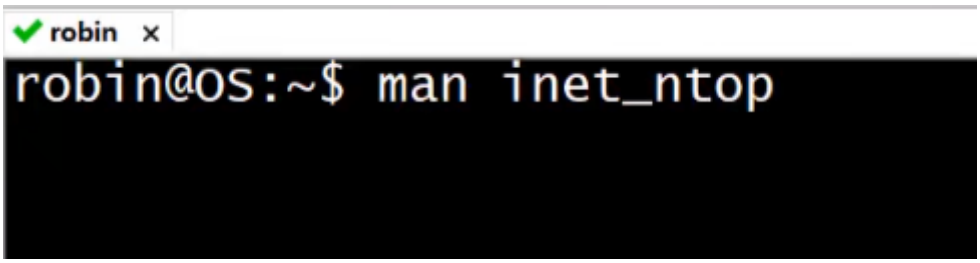
18.162.123.223（远程服务器能ping通）

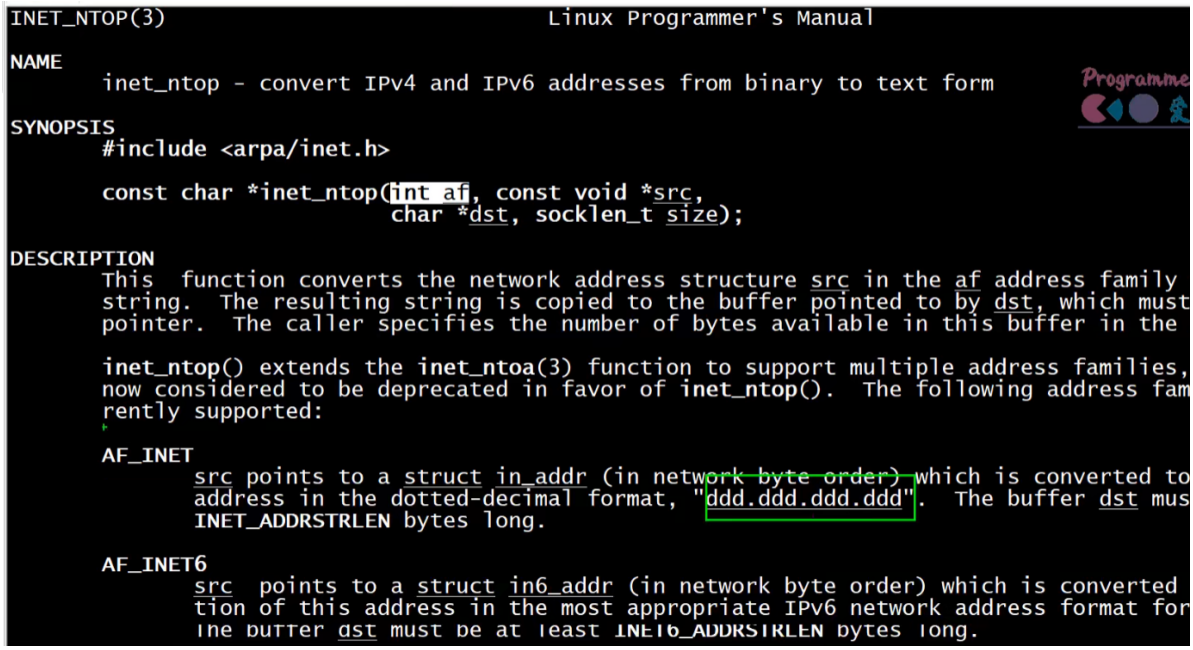
命令行输入：

curl ifconfig.me

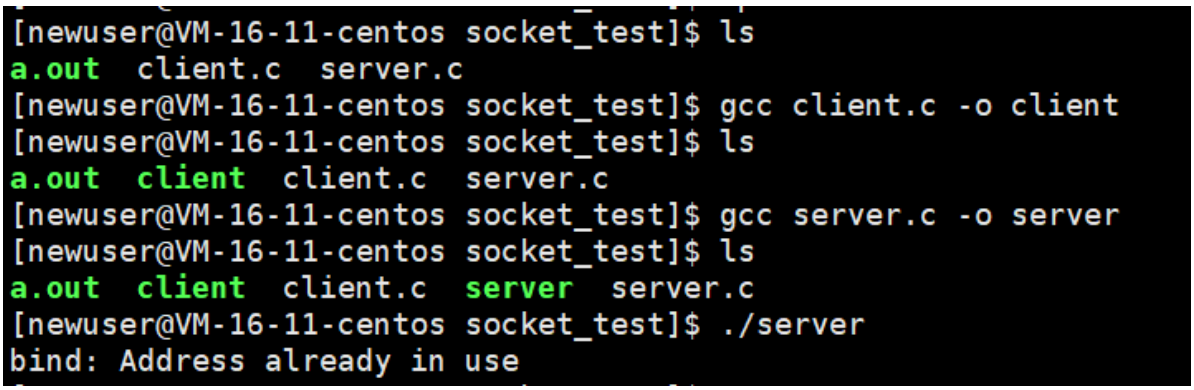
输出：210.30.193.187（ping不通，可能原因是校园网是局域网）

linux:查看man文档





编译运行，报错：bind: Address already in use



原因：9999端口被占用

解决：

1、使用 netstat -tulpn 查看 端口使用情况

netstat -tulpn

2、找到被占用的端口（确认该端口对应的服务是即将启用的服务）
netstat -tulpn | grep 9999

```
[newuser@VM-16-11-centos socket_test]$ netstat -tulpn | grep 9999
(Not all processes could be identified, non-owned process info
 will not be shown, you would have to be root to see it all.)
tcp        0      0 0.0.0.0:9999            0.0.0.0:*               LISTEN      -
```

返回如下：没有root权限，信息展示不全

root后：

```
[newuser@VM-16-11-centos socket_test]$ su
Password:
[root@VM-16-11-centos socket_test]# netstat -tulpn | grep 9999
tcp        0      0 0.0.0.0:9999            0.0.0.0:*               LISTEN      8598/ChatServer.
out
```

3、释放对应的端口pid(8598)

```
[root@VM-16-11-centos socket_test]# kill -9 8598
```