

第五次任务提交

```
int main()
{
    TestSerial();//连接串口，循环写入数据
    TestTCP();    //TCP连接，读写操作
}
```

虚拟串口测试

在ubuntu下，使用socat命令创建虚拟串口

```
socat -d -d pty,raw,echo=0 pty,raw,echo=0 &
```

进行虚拟串口测试

```
root@DESKTOP-GRI2LQA:/home/qmy/resource# ./SerialPortIO
[2023-11-23 20:40:50.861] [info] Building Shared SerialPort({"IsConnected":false,"CharacterSize":8,"BaudRate":115200,"DeviceName":"/dev/pts/3"})
[2023-11-23 20:40:50.861] [info] Finished building SerialPort(/dev/pts/3)
[2023-11-23 20:40:50.861] [info] SerialPort(/dev/pts/3)> Refreshing connection
[2023-11-23 20:40:51.861] [info] SerialPort(/dev/pts/3)> Write 128:128 bytes, failed(false), failure(Success)
[2023-11-23 20:40:52.862] [info] SerialPort(/dev/pts/3)> Write 128:128 bytes, failed(false), failure(Success)
[2023-11-23 20:40:53.862] [info] SerialPort(/dev/pts/3)> Write 128:128 bytes, failed(false), failure(Success)
[2023-11-23 20:40:54.863] [info] SerialPort(/dev/pts/3)> Write 128:128 bytes, failed(false), failure(Success)
[2023-11-23 20:40:55.863] [info] SerialPort(/dev/pts/3)> Write 128:128 bytes, failed(false), failure(Success)
[2023-11-23 20:40:56.863] [info] SerialPort(/dev/pts/3)> Write 128:128 bytes, failed(false), failure(Success)
[2023-11-23 20:40:57.864] [info] SerialPort(/dev/pts/3)> Write 128:128 bytes, failed(false), failure(Success)
[2023-11-23 20:40:58.865] [info] SerialPort(/dev/pts/3)> Write 128:128 bytes, failed(false), failure(Success)
[2023-11-23 20:40:59.865] [info] SerialPort(/dev/pts/3)> Write 128:128 bytes, failed(false), failure(Success)
[2023-11-23 20:41:00.866] [info] SerialPort(/dev/pts/3)> Write 128:128 bytes, failed(false), failure(Success)
[2023-11-23 20:41:01.866] [info] SerialPort(/dev/pts/3)> Write 128:128 bytes, failed(false), failure(Success)
[2023-11-23 20:41:02.866] [info] SerialPort(/dev/pts/3)> Write 128:128 bytes, failed(false), failure(Success)
[2023-11-23 20:41:03.867] [info] SerialPort(/dev/pts/3)> Write 128:128 bytes, failed(false), failure(Success)
[2023-11-23 20:41:04.867] [info] SerialPort(/dev/pts/3)> Write 128:128 bytes, failed(false), failure(Success)
[2023-11-23 20:41:05.868] [info] SerialPort(/dev/pts/3)> Write 128:128 bytes, failed(false), failure(Success)
[2023-11-23 20:41:06.868] [info] SerialPort(/dev/pts/3)> Write 128:128 bytes, failed(false), failure(Success)
[2023-11-23 20:41:07.868] [info] SerialPort(/dev/pts/3)> Write 128:128 bytes, failed(false), failure(Success)
[2023-11-23 20:41:08.869] [info] SerialPort(/dev/pts/3)> Write 128:128 bytes, failed(false), failure(Success)
[2023-11-23 20:41:09.869] [info] SerialPort(/dev/pts/3)> Write 128:128 bytes, failed(false), failure(Success)
[2023-11-23 20:41:10.869] [info] SerialPort(/dev/pts/3)> Write 128:128 bytes, failed(false), failure(Success)
[2023-11-23 20:41:11.870] [info] SerialPort(/dev/pts/3)> Write 128:128 bytes, failed(false), failure(Success)
[2023-11-23 20:41:12.870] [info] SerialPort(/dev/pts/3)> Write 128:128 bytes, failed(false), failure(Success)
[2023-11-23 20:41:13.870] [info] SerialPort(/dev/pts/3)> Write 128:128 bytes, failed(false), failure(Success)
[2023-11-23 20:41:14.871] [info] SerialPort(/dev/pts/3)> Write 128:128 bytes, failed(false), failure(Success)
[2023-11-23 20:41:15.871] [info] SerialPort(/dev/pts/3)> Write 128:128 bytes, failed(false), failure(Success)
[2023-11-23 20:41:16.872] [info] SerialPort(/dev/pts/3)> Write 128:128 bytes, failed(false), failure(Success)
[2023-11-23 20:41:17.872] [info] SerialPort(/dev/pts/3)> Write 128:128 bytes, failed(false), failure(Success)
```

测试成功

TCP连接测试

连接到主机地址为127.0.0.53，端口为53

```
root@DESKTOP-GRI2LQA:/home/qmy/resource# ./SerialPortIO
[2023-11-23 20:38:34.130] [info] Building Shared TCPConnection(127.0.0.53:53)
[2023-11-23 20:38:34.130] [info] Finished building TCPConnection(127.0.0.53:53)
[2023-11-23 20:38:34.130] [info] TCPConnection(127.0.0.53:53)> Refreshing connection
[2023-11-23 20:38:34.130] [info] TCPConnection(127.0.0.53:53)> Write 13:13 bytes, failed(false), failure(Success)
[2023-11-23 20:38:44.160] [info] TCPConnection(127.0.0.53:53)> Read 0:1 bytes, failed(true), failure(End of file)

[2023-11-23 20:38:44.160] [info] TCPConnection(127.0.0.53:53)> Trying closing
[2023-11-23 20:38:44.160] [info] TCPConnection(127.0.0.53:53)> Closed
root@DESKTOP-GRI2LQA:/home/qmy/resource#
```

测试成功