【实验方法】

分别运行selec-server, poll-server, epoll-server

分别执行time sh multiuser.sh + 执行次数i 获得执行时间

【测试脚本】multiuser.sh

#!bin/bash

for ((i = 0; i < $1; i++));

do

./client 127.0.0.1 &

done

wait

【测试结果】(单位为秒）

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| i = 100 | 1 | 2 | 3 | 4 | 5 |
| select-server | 0.021 | 0.021 | 0.021 | 0.021 | 0.02 |
| poll-server | 0.02 | 0.021 | 0.02 | 0.019 | 0.02 |
| epoll-server | 0.022 | 0.02 | 0.022 | 0.02 | 0.021 |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| i = 1000 | 1 | 2 | 3 | 4 | 5 |
| select-server | 0.021 | 0.021 | 0.021 | 0.021 | 0.02 |
| poll-server | 0.174 | 1.111 | 1.153 | 0.179 | 0.178 |
| epoll-server | 1.93 | 0.171 | 0.176 | 0.177 | 1.163 |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| i= 10000 | 1 | 2 | 3 | 4 | 5 |
| select-server | 3.024 | 3.627 | 2.091 | 2.955 | 4.457 |
| poll-server | 2.992 | 2.983 | 2.948 | 2.967 | 2.906 |
| epoll-server | 2.9 | 2.964 | 2.905 | 2.971 | 3.011 |

测试下来，发现select, poll, epoll三种方式的结果比较接近，但是理论上使用epoll的效率应该更高才对。另外，尤其在i=1000时，测试结果波动较大，感觉不太好取平均值计算每秒处理请求次数。