Van Mai Nguyen Thi
Embedded OS
Lab 7: Client-Server II: Pi Sockets

Server on pi, client on another computer
Input/output:
5.1019160747528076, 5.102435827255249, 5.0914030075073242
mean = 5.098584969838

turn on/turn off
5.0488998889923096, 5.082252025604248, 5.0721240043640137
mean = 5.067758639654

pull up/pull down
5.0684549808502197, 5.0654609203338623, 5.0922501087188721
mean = 5.075388669968

get state
5.0472681522369385, 5.0757060050964355, 5.0090670585632324
mean = 5.044013738632

Server and client on pi
Input/output:
5.00203800201416, 5.0014660358428955, 5.001447916030884
mean = 5.001650651296

turn on/turn off
5.001430988311768, 5.0013978481292725, 5.001430988311768
mean = 5.001419941584

pull up/pull down
5.001451015472412, 5.001345872879028, 5.000932931900024
mean = 5.001243273417

get state
5.001345157623291, 5.000935077667236, 5.00139307975769
mean = 5.001224438349

Clearly, the latency is smaller when both the client and server are on the pi. That is because that case gives the advantage of running both files on the same hardware and operating system, and not having to connect through the Ethernet.