

Adnan Ahmed - 0883865
CIS*3210 - Assignment 1 Test Results

Ping Times

Same machine ping results:

```
PING 127.0.0.1 (127.0.0.1): 56 data bytes
64 bytes from 127.0.0.1: icmp_seq=0 ttl=64 time=0.048 ms
64 bytes from 127.0.0.1: icmp_seq=1 ttl=64 time=0.070 ms
64 bytes from 127.0.0.1: icmp_seq=2 ttl=64 time=0.076 ms
64 bytes from 127.0.0.1: icmp_seq=3 ttl=64 time=0.075 ms
64 bytes from 127.0.0.1: icmp_seq=4 ttl=64 time=0.075 ms
64 bytes from 127.0.0.1: icmp_seq=5 ttl=64 time=0.071 ms
64 bytes from 127.0.0.1: icmp_seq=6 ttl=64 time=0.064 ms
64 bytes from 127.0.0.1: icmp_seq=7 ttl=64 time=0.032 ms
64 bytes from 127.0.0.1: icmp_seq=8 ttl=64 time=0.082 ms
64 bytes from 127.0.0.1: icmp_seq=9 ttl=64 time=0.076 ms
64 bytes from 127.0.0.1: icmp_seq=10 ttl=64 time=0.079 ms
64 bytes from 127.0.0.1: icmp_seq=11 ttl=64 time=0.073 ms
64 bytes from 127.0.0.1: icmp_seq=12 ttl=64 time=0.079 ms
64 bytes from 127.0.0.1: icmp_seq=13 ttl=64 time=0.095 ms
64 bytes from 127.0.0.1: icmp_seq=14 ttl=64 time=0.074 ms
64 bytes from 127.0.0.1: icmp_seq=15 ttl=64 time=0.094 ms
64 bytes from 127.0.0.1: icmp_seq=16 ttl=64 time=0.088 ms
64 bytes from 127.0.0.1: icmp_seq=17 ttl=64 time=0.079 ms
64 bytes from 127.0.0.1: icmp_seq=18 ttl=64 time=0.076 ms
64 bytes from 127.0.0.1: icmp_seq=19 ttl=64 time=0.082 ms
64 bytes from 127.0.0.1: icmp_seq=20 ttl=64 time=0.070 ms
64 bytes from 127.0.0.1: icmp_seq=21 ttl=64 time=0.070 ms
64 bytes from 127.0.0.1: icmp_seq=22 ttl=64 time=0.072 ms
64 bytes from 127.0.0.1: icmp_seq=23 ttl=64 time=0.083 ms
64 bytes from 127.0.0.1: icmp_seq=24 ttl=64 time=0.068 ms
64 bytes from 127.0.0.1: icmp_seq=25 ttl=64 time=0.087 ms
64 bytes from 127.0.0.1: icmp_seq=26 ttl=64 time=0.097 ms
64 bytes from 127.0.0.1: icmp_seq=27 ttl=64 time=0.076 ms
64 bytes from 127.0.0.1: icmp_seq=28 ttl=64 time=0.083 ms
64 bytes from 127.0.0.1: icmp_seq=29 ttl=64 time=0.076 ms
64 bytes from 127.0.0.1: icmp_seq=30 ttl=64 time=0.071 ms
64 bytes from 127.0.0.1: icmp_seq=31 ttl=64 time=0.071 ms
64 bytes from 127.0.0.1: icmp_seq=32 ttl=64 time=0.075 ms
64 bytes from 127.0.0.1: icmp_seq=33 ttl=64 time=0.082 ms
64 bytes from 127.0.0.1: icmp_seq=34 ttl=64 time=0.075 ms
64 bytes from 127.0.0.1: icmp_seq=35 ttl=64 time=0.073 ms
64 bytes from 127.0.0.1: icmp_seq=36 ttl=64 time=0.076 ms
64 bytes from 127.0.0.1: icmp_seq=37 ttl=64 time=0.085 ms
64 bytes from 127.0.0.1: icmp_seq=38 ttl=64 time=0.071 ms
64 bytes from 127.0.0.1: icmp_seq=39 ttl=64 time=0.078 ms
64 bytes from 127.0.0.1: icmp_seq=40 ttl=64 time=0.073 ms
64 bytes from 127.0.0.1: icmp_seq=41 ttl=64 time=0.075 ms
64 bytes from 127.0.0.1: icmp_seq=42 ttl=64 time=0.084 ms
64 bytes from 127.0.0.1: icmp_seq=43 ttl=64 time=0.071 ms
64 bytes from 127.0.0.1: icmp_seq=44 ttl=64 time=0.073 ms
64 bytes from 127.0.0.1: icmp_seq=45 ttl=64 time=0.078 ms
64 bytes from 127.0.0.1: icmp_seq=46 ttl=64 time=0.083 ms
64 bytes from 127.0.0.1: icmp_seq=47 ttl=64 time=0.074 ms
64 bytes from 127.0.0.1: icmp_seq=48 ttl=64 time=0.073 ms
64 bytes from 127.0.0.1: icmp_seq=49 ttl=64 time=0.081 ms
^C
--- 127.0.0.1 ping statistics ---
50 packets transmitted, 50 packets received, 0.0% packet loss
round-trip min/avg/max/stddev = 0.032/0.076/0.097/0.010 ms
```

Client at school (wireless),
server (linux.socs.uoguelph.ca)
ping results:

```
PING ginny.socs.uoguelph.ca (131.104.48.73): 56 data bytes
64 bytes from 131.104.48.73: icmp_seq=0 ttl=62 time=2.963 ms
64 bytes from 131.104.48.73: icmp_seq=1 ttl=62 time=1.995 ms
64 bytes from 131.104.48.73: icmp_seq=2 ttl=62 time=2.978 ms
64 bytes from 131.104.48.73: icmp_seq=3 ttl=62 time=2.977 ms
64 bytes from 131.104.48.73: icmp_seq=4 ttl=62 time=3.013 ms
64 bytes from 131.104.48.73: icmp_seq=5 ttl=62 time=3.018 ms
64 bytes from 131.104.48.73: icmp_seq=6 ttl=62 time=3.152 ms
64 bytes from 131.104.48.73: icmp_seq=7 ttl=62 time=3.038 ms
64 bytes from 131.104.48.73: icmp_seq=8 ttl=62 time=2.885 ms
64 bytes from 131.104.48.73: icmp_seq=9 ttl=62 time=3.069 ms
64 bytes from 131.104.48.73: icmp_seq=10 ttl=62 time=3.049 ms
64 bytes from 131.104.48.73: icmp_seq=11 ttl=62 time=3.011 ms
64 bytes from 131.104.48.73: icmp_seq=12 ttl=62 time=2.907 ms
64 bytes from 131.104.48.73: icmp_seq=13 ttl=62 time=3.143 ms
64 bytes from 131.104.48.73: icmp_seq=14 ttl=62 time=2.986 ms
64 bytes from 131.104.48.73: icmp_seq=15 ttl=62 time=3.064 ms
64 bytes from 131.104.48.73: icmp_seq=16 ttl=62 time=3.104 ms
64 bytes from 131.104.48.73: icmp_seq=17 ttl=62 time=1.921 ms
64 bytes from 131.104.48.73: icmp_seq=18 ttl=62 time=3.111 ms
64 bytes from 131.104.48.73: icmp_seq=19 ttl=62 time=3.204 ms
64 bytes from 131.104.48.73: icmp_seq=20 ttl=62 time=3.097 ms
64 bytes from 131.104.48.73: icmp_seq=21 ttl=62 time=2.984 ms
64 bytes from 131.104.48.73: icmp_seq=22 ttl=62 time=3.001 ms
64 bytes from 131.104.48.73: icmp_seq=23 ttl=62 time=3.163 ms
64 bytes from 131.104.48.73: icmp_seq=24 ttl=62 time=3.148 ms
64 bytes from 131.104.48.73: icmp_seq=25 ttl=62 time=3.198 ms
64 bytes from 131.104.48.73: icmp_seq=26 ttl=62 time=2.966 ms
64 bytes from 131.104.48.73: icmp_seq=27 ttl=62 time=2.898 ms
64 bytes from 131.104.48.73: icmp_seq=28 ttl=62 time=1.797 ms
64 bytes from 131.104.48.73: icmp_seq=29 ttl=62 time=3.042 ms
64 bytes from 131.104.48.73: icmp_seq=30 ttl=62 time=2.901 ms
64 bytes from 131.104.48.73: icmp_seq=31 ttl=62 time=3.151 ms
64 bytes from 131.104.48.73: icmp_seq=32 ttl=62 time=3.161 ms
64 bytes from 131.104.48.73: icmp_seq=33 ttl=62 time=1.872 ms
64 bytes from 131.104.48.73: icmp_seq=34 ttl=62 time=2.978 ms
64 bytes from 131.104.48.73: icmp_seq=35 ttl=62 time=3.020 ms
64 bytes from 131.104.48.73: icmp_seq=36 ttl=62 time=3.449 ms
64 bytes from 131.104.48.73: icmp_seq=37 ttl=62 time=2.861 ms
64 bytes from 131.104.48.73: icmp_seq=38 ttl=62 time=1.841 ms
64 bytes from 131.104.48.73: icmp_seq=39 ttl=62 time=3.153 ms
64 bytes from 131.104.48.73: icmp_seq=40 ttl=62 time=3.003 ms
64 bytes from 131.104.48.73: icmp_seq=41 ttl=62 time=2.869 ms
64 bytes from 131.104.48.73: icmp_seq=42 ttl=62 time=3.014 ms
64 bytes from 131.104.48.73: icmp_seq=43 ttl=62 time=2.070 ms
64 bytes from 131.104.48.73: icmp_seq=44 ttl=62 time=2.985 ms
64 bytes from 131.104.48.73: icmp_seq=45 ttl=62 time=3.097 ms
64 bytes from 131.104.48.73: icmp_seq=46 ttl=62 time=2.973 ms
64 bytes from 131.104.48.73: icmp_seq=47 ttl=62 time=3.014 ms
64 bytes from 131.104.48.73: icmp_seq=48 ttl=62 time=3.017 ms
64 bytes from 131.104.48.73: icmp_seq=49 ttl=62 time=2.211 ms
^C
--- ginny.socs.uoguelph.ca ping statistics ---
50 packets transmitted, 50 packets received, 0.0% packet loss
round-trip min/avg/max/stddev = 1.797/2.890/3.449/0.393 ms
```

Client at school (wired),
Server (linux.socs.uoguelph.ca)
ping results:

```
PING george.socs.uoguelph.ca (131.104.48.72): 56 data bytes
64 bytes from 131.104.48.72: icmp_seq=0 ttl=61 time=0.451 ms
64 bytes from 131.104.48.72: icmp_seq=1 ttl=61 time=0.490 ms
64 bytes from 131.104.48.72: icmp_seq=2 ttl=61 time=0.411 ms
64 bytes from 131.104.48.72: icmp_seq=3 ttl=61 time=0.482 ms
64 bytes from 131.104.48.72: icmp_seq=4 ttl=61 time=0.427 ms
64 bytes from 131.104.48.72: icmp_seq=5 ttl=61 time=0.467 ms
64 bytes from 131.104.48.72: icmp_seq=6 ttl=61 time=0.445 ms
64 bytes from 131.104.48.72: icmp_seq=7 ttl=61 time=0.603 ms
64 bytes from 131.104.48.72: icmp_seq=8 ttl=61 time=0.333 ms
64 bytes from 131.104.48.72: icmp_seq=9 ttl=61 time=0.489 ms
64 bytes from 131.104.48.72: icmp_seq=10 ttl=61 time=0.387 ms
64 bytes from 131.104.48.72: icmp_seq=11 ttl=61 time=0.408 ms
64 bytes from 131.104.48.72: icmp_seq=12 ttl=61 time=0.431 ms
64 bytes from 131.104.48.72: icmp_seq=13 ttl=61 time=0.405 ms
64 bytes from 131.104.48.72: icmp_seq=14 ttl=61 time=0.589 ms
64 bytes from 131.104.48.72: icmp_seq=15 ttl=61 time=0.384 ms
64 bytes from 131.104.48.72: icmp_seq=16 ttl=61 time=0.557 ms
64 bytes from 131.104.48.72: icmp_seq=17 ttl=61 time=0.489 ms
64 bytes from 131.104.48.72: icmp_seq=18 ttl=61 time=0.366 ms
64 bytes from 131.104.48.72: icmp_seq=19 ttl=61 time=0.405 ms
64 bytes from 131.104.48.72: icmp_seq=20 ttl=61 time=0.322 ms
64 bytes from 131.104.48.72: icmp_seq=21 ttl=61 time=0.429 ms
64 bytes from 131.104.48.72: icmp_seq=22 ttl=61 time=0.434 ms
64 bytes from 131.104.48.72: icmp_seq=23 ttl=61 time=0.395 ms
64 bytes from 131.104.48.72: icmp_seq=24 ttl=61 time=0.496 ms
64 bytes from 131.104.48.72: icmp_seq=25 ttl=61 time=0.559 ms
64 bytes from 131.104.48.72: icmp_seq=26 ttl=61 time=0.490 ms
64 bytes from 131.104.48.72: icmp_seq=27 ttl=61 time=0.425 ms
64 bytes from 131.104.48.72: icmp_seq=28 ttl=61 time=0.591 ms
64 bytes from 131.104.48.72: icmp_seq=29 ttl=61 time=0.568 ms
64 bytes from 131.104.48.72: icmp_seq=30 ttl=61 time=0.504 ms
64 bytes from 131.104.48.72: icmp_seq=31 ttl=61 time=0.498 ms
64 bytes from 131.104.48.72: icmp_seq=32 ttl=61 time=0.531 ms
64 bytes from 131.104.48.72: icmp_seq=33 ttl=61 time=0.479 ms
64 bytes from 131.104.48.72: icmp_seq=34 ttl=61 time=0.495 ms
64 bytes from 131.104.48.72: icmp_seq=35 ttl=61 time=0.483 ms
64 bytes from 131.104.48.72: icmp_seq=36 ttl=61 time=0.480 ms
64 bytes from 131.104.48.72: icmp_seq=37 ttl=61 time=0.578 ms
64 bytes from 131.104.48.72: icmp_seq=38 ttl=61 time=0.607 ms
64 bytes from 131.104.48.72: icmp_seq=39 ttl=61 time=0.513 ms
64 bytes from 131.104.48.72: icmp_seq=40 ttl=61 time=0.532 ms
64 bytes from 131.104.48.72: icmp_seq=41 ttl=61 time=0.441 ms
64 bytes from 131.104.48.72: icmp_seq=42 ttl=61 time=0.543 ms
64 bytes from 131.104.48.72: icmp_seq=43 ttl=61 time=0.566 ms
64 bytes from 131.104.48.72: icmp_seq=44 ttl=61 time=0.455 ms
64 bytes from 131.104.48.72: icmp_seq=45 ttl=61 time=0.392 ms
64 bytes from 131.104.48.72: icmp_seq=46 ttl=61 time=0.488 ms
64 bytes from 131.104.48.72: icmp_seq=47 ttl=61 time=0.471 ms
64 bytes from 131.104.48.72: icmp_seq=48 ttl=61 time=0.436 ms
64 bytes from 131.104.48.72: icmp_seq=49 ttl=61 time=0.485 ms
```

```
--- george.socs.uoguelph.ca ping statistics ---
50 packets transmitted, 50 packets received, 0.0% packet loss
round-trip min/avg/max/stddev = 0.322/0.474/0.607/0.069 ms
```

client at home (wireless),
server (linux.socs.uoguelph.ca)
ping results:

```
PING george.socs.uoguelph.ca (131.104.48.72): 56 data bytes
64 bytes from 131.104.48.72: icmp_seq=0 ttl=50 time=37.919 ms
64 bytes from 131.104.48.72: icmp_seq=1 ttl=50 time=36.472 ms
64 bytes from 131.104.48.72: icmp_seq=2 ttl=50 time=35.237 ms
64 bytes from 131.104.48.72: icmp_seq=3 ttl=50 time=34.891 ms
64 bytes from 131.104.48.72: icmp_seq=4 ttl=50 time=39.485 ms
64 bytes from 131.104.48.72: icmp_seq=5 ttl=50 time=39.339 ms
64 bytes from 131.104.48.72: icmp_seq=6 ttl=50 time=36.221 ms
64 bytes from 131.104.48.72: icmp_seq=7 ttl=50 time=39.227 ms
64 bytes from 131.104.48.72: icmp_seq=8 ttl=50 time=41.681 ms
64 bytes from 131.104.48.72: icmp_seq=9 ttl=50 time=48.094 ms
64 bytes from 131.104.48.72: icmp_seq=10 ttl=50 time=74.731 ms
64 bytes from 131.104.48.72: icmp_seq=11 ttl=50 time=36.698 ms
64 bytes from 131.104.48.72: icmp_seq=12 ttl=50 time=36.777 ms
64 bytes from 131.104.48.72: icmp_seq=13 ttl=50 time=91.578 ms
64 bytes from 131.104.48.72: icmp_seq=14 ttl=50 time=36.361 ms
64 bytes from 131.104.48.72: icmp_seq=15 ttl=50 time=36.511 ms
64 bytes from 131.104.48.72: icmp_seq=16 ttl=50 time=41.281 ms
64 bytes from 131.104.48.72: icmp_seq=17 ttl=50 time=41.228 ms
64 bytes from 131.104.48.72: icmp_seq=18 ttl=50 time=46.494 ms
64 bytes from 131.104.48.72: icmp_seq=19 ttl=50 time=52.587 ms
64 bytes from 131.104.48.72: icmp_seq=20 ttl=50 time=36.281 ms
64 bytes from 131.104.48.72: icmp_seq=21 ttl=50 time=35.851 ms
64 bytes from 131.104.48.72: icmp_seq=22 ttl=50 time=35.504 ms
64 bytes from 131.104.48.72: icmp_seq=23 ttl=50 time=38.541 ms
64 bytes from 131.104.48.72: icmp_seq=24 ttl=50 time=37.968 ms
64 bytes from 131.104.48.72: icmp_seq=25 ttl=50 time=39.025 ms
64 bytes from 131.104.48.72: icmp_seq=26 ttl=50 time=36.059 ms
64 bytes from 131.104.48.72: icmp_seq=27 ttl=50 time=34.750 ms
64 bytes from 131.104.48.72: icmp_seq=28 ttl=50 time=36.411 ms
64 bytes from 131.104.48.72: icmp_seq=29 ttl=50 time=34.544 ms
64 bytes from 131.104.48.72: icmp_seq=30 ttl=50 time=36.842 ms
64 bytes from 131.104.48.72: icmp_seq=31 ttl=50 time=37.995 ms
64 bytes from 131.104.48.72: icmp_seq=32 ttl=50 time=36.889 ms
64 bytes from 131.104.48.72: icmp_seq=33 ttl=50 time=37.948 ms
64 bytes from 131.104.48.72: icmp_seq=34 ttl=50 time=103.919 ms
64 bytes from 131.104.48.72: icmp_seq=35 ttl=50 time=36.660 ms
64 bytes from 131.104.48.72: icmp_seq=36 ttl=50 time=37.593 ms
64 bytes from 131.104.48.72: icmp_seq=37 ttl=50 time=36.399 ms
64 bytes from 131.104.48.72: icmp_seq=38 ttl=50 time=37.905 ms
64 bytes from 131.104.48.72: icmp_seq=39 ttl=50 time=39.771 ms
64 bytes from 131.104.48.72: icmp_seq=40 ttl=50 time=37.811 ms
64 bytes from 131.104.48.72: icmp_seq=41 ttl=50 time=35.203 ms
64 bytes from 131.104.48.72: icmp_seq=42 ttl=50 time=37.120 ms
64 bytes from 131.104.48.72: icmp_seq=43 ttl=50 time=39.798 ms
64 bytes from 131.104.48.72: icmp_seq=44 ttl=50 time=40.980 ms
64 bytes from 131.104.48.72: icmp_seq=45 ttl=50 time=60.450 ms
64 bytes from 131.104.48.72: icmp_seq=46 ttl=50 time=37.111 ms
64 bytes from 131.104.48.72: icmp_seq=47 ttl=50 time=43.121 ms
64 bytes from 131.104.48.72: icmp_seq=48 ttl=50 time=37.927 ms
64 bytes from 131.104.48.72: icmp_seq=49 ttl=50 time=37.490 ms
```

```
--- george.socs.uoguelph.ca ping statistics ---
50 packets transmitted, 50 packets received, 0.0% packet loss
round-trip min/avg/max/stddev = 34.544/41.934/103.919/13.308 ms
```


Traceroute Results:

Same machine:

```
traceroute to 127.0.0.1 (127.0.0.1), 64 hops max, 52 byte packets
```

```
1  localhost (127.0.0.1)  0.244 ms  0.039 ms  0.022 ms
```

Client at school (wireless), server (linux.socs.uoguelph.ca):

```
traceroute to george.socs.uoguelph.ca (131.104.48.72), 64 hops max, 52 byte packets
```

```
1  10.11.80.1 (10.11.80.1)  2.032 ms  1.542 ms  1.463 ms
2  da-cj.net.uoguelph.ca (131.104.134.5)  1.740 ms  1.877 ms  1.452 ms
3  gradray-08.cis.uoguelph.ca (131.104.48.72)  2.613 ms  2.561 ms  11.630 ms
```

Client at school (wired), server (linux.socs.uoguelph.ca):

```
traceroute to percy.socs.uoguelph.ca (131.104.48.74), 64 hops max, 52 byte packets
```

```
1  192.168.49.1 (192.168.49.1)  0.563 ms  0.305 ms  0.291 ms
2  ca-dj.net.uoguelph.ca (131.104.133.6)  52.156 ms  0.724 ms  8.852 ms
3  da-ca.net.uoguelph.ca (131.104.134.1)  0.442 ms  0.448 ms  0.430 ms
4  percy.socs.uoguelph.ca (131.104.48.74)  0.610 ms  0.610 ms  0.485 ms
```

Client at home (wireless), server (linux.socs.uoguelph.ca):

```
traceroute: Warning: linux.socs.uoguelph.ca has multiple addresses; using 131.104.48.74
```

```
traceroute to linux.socs.uoguelph.ca (131.104.48.74), 64 hops max, 52 byte packets
```

```
1  mynetwork (192.168.2.1)  2.537 ms  1.375 ms  1.933 ms
2  10.11.0.177 (10.11.0.177)  20.969 ms  28.534 ms *
3  * 10.178.206.94 (10.178.206.94)  19.353 ms  16.790 ms
4  10.178.206.95 (10.178.206.95)  17.449 ms  20.071 ms  17.750 ms
5  tcore4-toronto12_2-8-0-0.net.bell.ca (64.230.104.186)  21.228 ms  21.228 ms
   tcore3-toronto12_2-8-0-0.net.bell.ca (64.230.104.184)  23.228 ms
6  tcore3-torontoxn_hundredgige0-5-0-0.net.bell.ca (64.230.50.5)  25.647 ms  20.647 ms  21.298 ms
7  bx1-torontoxn_et4-0-0.net.bell.ca (64.230.97.159)  18.350 ms
   bx1-torontoxn_et1-0-0.net.bell.ca (64.230.97.157)  17.279 ms
   bx1-torontoxn_et4-0-0.net.bell.ca (64.230.97.159)  17.579 ms
8  rogers.net.bell.ca (67.69.246.93)  17.725 ms  18.958 ms  18.378 ms
9  20-cgw01.mtnk.asr9k.rmgt.net.rogers.com (209.148.233.45)  18.795 ms  18.090 ms
   10-cgw01.mtnk.asr9k.rmgt.net.rogers.com (209.148.230.1)  19.097 ms
10 209.148.230.54 (209.148.230.54)  21.743 ms  26.837 ms  21.372 ms
11 24.156.146.198 (24.156.146.198)  31.146 ms  20.152 ms  20.510 ms
12 * * *
13 * lp2k9-2-154.zeropingevents.com (69.17.173.154)  22.852 ms !X *
14 * * *
15 * * *
16 * * *
17 * * *
18 * * *
19 * * *
20 * * *
21 * * *
22 * * *
23 * * *
24 * * *
25 * * *
26 * * *
27 spider.cis.uoguelph.ca (131.104.48.74)  37.428 ms  36.628 ms  35.765 ms
```

Transfer Rates:

Same machine:

Min - 0.000196 seconds

Max - 0.000456 seconds

Average - 0.000237 seconds

Client - school wireless, server - linux.socs.uoguelph.ca:

Min - 0.001014 seconds

Max - 0.002044 seconds

Average - 0.001374 seconds

Client - school wired, server - linux.socs.uoguelph.ca:

Min - 0.000757 seconds

Max - 0.001111 seconds

Average - 0.000945 seconds

Client - home wireless, server - linux.socs.uoguelph.ca

Min - 0.001244 seconds

Max - 0.001851 seconds

Average - 0.001467 seconds