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CSCI 351 Data Comm & Networks

HW 2

my_ping

```
PS C:\Users\finn\csci351\hw2> & C:/Python311/python.exe c:/Users/finn/csci351/hw2/my_ping.py -c 4  google.com
PING google.com with 56(84) bytes of data
64 bytes from 142.251.35.174: time=27.73ms ttl=118 icmp_seq=1
64 bytes from 142.251.35.174: time=32.56ms ttl=118 icmp_seq=2
64 bytes from 142.251.35.174: time=16.25ms ttl=118 icmp_seq=3
64 bytes from 142.251.35.174: time=16.68ms ttl=118 icmp_seq=4

google.com ping statistics:
        4 packets transmitted, 4 packets received, 0.0% packet loss, time 4109.86ms
        rtt min/avg/max: 16.25/23.30/32.56
```

```
PS C:\Users\finn\csci351\hw2> & C:/Python311/python.exe c:/Users/finn/csci351/hw2/my_ping.py -i 3  google.com
PING google.com with 56(84) bytes of data
64 bytes from 142.251.35.174: time=21.26ms ttl=118 icmp_seq=1
64 bytes from 142.251.35.174: time=32.94ms ttl=118 icmp_seq=2
64 bytes from 142.251.35.174: time=16.16ms ttl=118 icmp_seq=3
64 bytes from 142.251.35.174: time=16.12ms ttl=118 icmp_seq=4
64 bytes from 142.251.35.174: time=16.57ms ttl=118 icmp_seq=5
64 bytes from 142.251.35.174: time=18.34ms ttl=118 icmp_seq=6

google.com ping statistics:
        6 packets transmitted, 6 packets received, 0.0% packet loss, time 17183.06ms
        rtt min/avg/max: 16.12/20.23/32.94
```

```
PS C:\Users\finn\csci351\hw2> & C:/Python311/python.exe c:/Users/finn/csci351/hw2/my_ping.py -s 64  google.com
PING google.com with 64(92) bytes of data
72 bytes from 142.251.35.174: time=24.72ms ttl=118 icmp_seq=1
72 bytes from 142.251.35.174: time=38.96ms ttl=118 icmp_seq=2
72 bytes from 142.251.35.174: time=17.60ms ttl=118 icmp_seq=3
72 bytes from 142.251.35.174: time=19.61ms ttl=118 icmp_seq=4
72 bytes from 142.251.35.174: time=19.32ms ttl=118 icmp_seq=5
72 bytes from 142.251.35.174: time=15.76ms ttl=118 icmp_seq=6
72 bytes from 142.251.35.174: time=16.73ms ttl=118 icmp_seq=7

google.com ping statistics:
        7 packets transmitted, 7 packets received, 0.0% packet loss, time 6451.45ms
        rtt min/avg/max: 15.76/21.82/38.96
```

```
PS C:\Users\finn\csci351\hw2> & C:/Python311/python.exe c:/Users/finn/csci351/hw2/my_ping.py -t 5  google.com
PING google.com with 56(84) bytes of data
64 bytes from 142.251.35.174: time=23.30ms ttl=118 icmp_seq=1
64 bytes from 142.251.35.174: time=32.49ms ttl=118 icmp_seq=2
64 bytes from 142.251.35.174: time=16.63ms ttl=118 icmp_seq=3
64 bytes from 142.251.35.174: time=17.00ms ttl=118 icmp_seq=4
64 bytes from 142.251.35.174: time=16.24ms ttl=118 icmp_seq=5

google.com ping statistics:
        5 packets transmitted, 5 packets received, 0.0% packet loss, time 5142.07ms
        rtt min/avg/max: 16.24/21.13/32.49
```

my_traceroute

```
● PS C:\Users\finn\csci351\hw2> & C:/Python311/python.exe c:/Users/finn/csci351/hw2/my_traceroute.py -n  google.com
  1        172.16.11.1
  1        172.16.11.1
  1        172.16.11.1
  2        209.35.106.36
  2        209.35.106.36
  2        209.35.106.36
  3        209.126.37.38
  3        209.126.37.38
  3        209.126.37.38
  4        69.174.20.209
  4        69.174.20.209
  4        69.174.20.209
  5        199.229.231.78
  5        199.229.231.78
  5        199.229.231.78
  6        108.170.226.109
  6        108.170.226.109
  6        108.170.226.109
  7        142.251.64.5
  7        142.251.64.5
  7        142.251.64.5
  8        142.251.35.174
  Trace completed
```

```
● PS C:\Users\finn\csci351\hw2> & C:/Python311/python.exe c:/Users/finn/csci351/hw2/my_traceroute.py -q 1  google.com
  1        ???     172.16.11.1
  2        ???     209.35.106.36
  3        ???     209.126.37.38
  4        et-0-0-23.cr2-nyc2.ip4.gtt.net  69.174.20.209
  5        as15169.cr5-nyc2.ip4.gtt.net    199.229.231.78
  6        ???     108.170.226.109
  7        ???     142.251.64.5
  8        lga25s78-in-f14.1e100.net       142.251.35.174
  Trace completed
```

```
● PS C:\Users\finn\csci351\hw2> & C:/Python311/python.exe c:/Users/finn/csci351/hw2/my_traceroute.py -S  google.com
  1        ???     172.16.11.1
  1        ???     172.16.11.1
  1        ???     172.16.11.1
  0 unanswered probes for ttl 1
  2        ???     209.35.106.36
  2        ???     209.35.106.36
  2        ???     209.35.106.36
  0 unanswered probes for ttl 2
  3        ???     209.126.37.38
  3        ???     209.126.37.38
  3        ???     209.126.37.38
  0 unanswered probes for ttl 3
  4        et-0-0-23.cr2-nyc2.ip4.gtt.net  69.174.20.209
  4        et-0-0-23.cr2-nyc2.ip4.gtt.net  69.174.20.209
  4        et-0-0-23.cr2-nyc2.ip4.gtt.net  69.174.20.209
  0 unanswered probes for ttl 4
  5        as15169.cr5-nyc2.ip4.gtt.net    199.229.231.78
  5        as15169.cr5-nyc2.ip4.gtt.net    199.229.231.78
  5        as15169.cr5-nyc2.ip4.gtt.net    199.229.231.78
  0 unanswered probes for ttl 5
  6        ???     108.170.226.109
  6        ???     108.170.226.109
  6        ???     108.170.226.109
  0 unanswered probes for ttl 6
  7        ???     142.251.64.5
  7        ???     142.251.64.5
  7        ???     142.251.64.5
  0 unanswered probes for ttl 7
  8        lga25s78-in-f14.1e100.net       142.251.35.174
  Trace completed
```