COMP3331 Lab 1

Exercise 1:

1. Server: 129.94.242.2
Address: 129.94.242.2#53

Non-authoritative answer:
Name: www.koala.com.au
Address: 104.21.45.210
Name: www.koala.com.au
Address: 172.67.219.46

Answer:
Having several IP addresses as an output will prevent traffic from being exchanged via the gateway, speeding things up and reducing the load.

2. Server: 129.94.242.2
Address: 129.94.242.2#53

1.0.0.127.in-addr.arpaname = localhost.

Answer:
This IP address is special because everyone can use this IP address as their own, but it doesn't let computers communicate with other devices as a real IP address does.

Exercise 2:

- ☑ ~~www.unsw.edu.au~~
- ☐ www.getfittest.com.au
- ☑ ~~www.mit.edu~~
- ☑ ~~www.intel.com.au~~
- ☑ ~~www.tpg.com.au~~
- ☐ www.hola.hp
- ☑ ~~www.amazon.com~~
- ☑ ~~www.tsinghua.edu.cn~~
- ☐ www.kremlin.ru
- ☑ ~~8.8.8.8~~

Ticked box means the website is reachable by ping.

---

ping: unknown host www.getfittest.com.au

ping: unknown host www.hola.hp

--- www.kremlin.ru ping statistics ---
128 packets transmitted, 0 received, 100% packet loss, time 130029ms

---

Answer:
www.getfittest.com.au and www.hola.hp are not reachable and cannot be accessed from a web browser, because their host server name does not exist.
www.kremlin.ru is not reachable by the ping command but it is accessible via a web browser. This may be because this website is configured not to respond to ping for security purposes to prevent potential DoS attacks.

Exercise 3:

1. Traceroute output:

traceroute to www.columbia.edu (128.59.105.24), 30 hops max, 60 byte packets
1 cserouter1-server.cse.unsw.EDU.AU (129.94.242.251) 0.076 ms 0.043 ms 0.068 ms
2 129.94.39.17 (129.94.39.17) 0.873 ms 0.894 ms 0.899 ms
3 libudnex1-vl-3154.gw.unsw.edu.au (149.171.253.34) 2.131 ms
ombudnex1-vl-3154.gw.unsw.edu.au (149.171.253.35) 1.580 ms
libudnex1-vl-3154.gw.unsw.edu.au (149.171.253.34) 2.093 ms
4 ombcr1-po-5.gw.unsw.edu.au (149.171.255.197) 1.114 ms libcr1-po-6.gw.unsw.edu.au
(149.171.255.201) 1.108 ms ombcr1-po-6.gw.unsw.edu.au (149.171.255.169) 1.107 ms
5 unswbr1-te-1-9.gw.unsw.edu.au (149.171.255.101) 1.100 ms
unswbr1-te-2-13.gw.unsw.edu.au (149.171.255.105) 1.103 ms 1.246 ms
6 138.44.5.0 (138.44.5.0) 1.488 ms 1.307 ms 1.283 ms
7 et-1-1-0.pe1.mcqp.nsw.aarnet.net.au (113.197.15.4) 1.779 ms 1.885 ms 1.776 ms
8 et-0_0_2.bdr1.guam.gum.aarnet.net.au (113.197.14.137) 71.518 ms 71.632 ms 71.578
ms
9 138.44.228.5 (138.44.228.5) 185.089 ms 185.080 ms 185.060 ms
10 ae-7.4078.rtsw.losa.net.internet2.edu (163.253.0.149) 184.247 ms 184.483 ms
184.423 ms
11 ae-1.4079.rtsw.salt.net.internet2.edu (162.252.70.115) 196.379 ms 196.427 ms
196.351 ms
12 ae-5.4079.rtsw.kans.net.internet2.edu (162.252.70.144) 218.223 ms 218.118 ms
218.481 ms
13 ae-3.4079.rtsw.chic.net.internet2.edu (162.252.70.140) 228.701 ms 228.687 ms
bundle-ether1.4078.core1.kans.net.internet2.edu (163.253.0.144) 236.786 ms
14 bundle-ether1.4078.core2.chic.net.internet2.edu (163.253.0.134) 238.084 ms 236.003
ms ae-9.4070.rtsw3.eqch.net.internet2.edu (64.57.28.105) 228.682 ms
15 163.253.2.19 (163.253.2.19) 236.165 ms 236.216 ms 236.189 ms
16 163.253.2.16 (163.253.2.16) 237.543 ms 237.977 ms 235.752 ms
17 buf-9208-I2-CLEV.nysernet.net (199.109.11.33) 239.153 ms 238.911 ms 238.808 ms
18 syr-55a1-buf-9208.nysernet.net (199.109.7.213) 241.710 ms 241.804 ms 241.609 ms
19 nyc32-55a1-syr-55a1.nysernet.net (199.109.7.206) 246.821 ms 246.725 ms 246.940
ms
20 nyc32-9208-nyc32-55a1.nysernet.net (199.109.7.201) 246.366 ms 246.296 ms
246.305 ms
21 columbia.nyc-9208.nysernet.net (199.109.4.14) 246.400 ms 246.227 ms 246.370 ms
22 cc-core-1-x-nyser32-gw-1.net.columbia.edu (128.59.255.5) 246.731 ms 246.668 ms
246.712 ms
23 cc-conc-1-x-cc-core-1.net.columbia.edu (128.59.255.21) 246.693 ms 246.942 ms
246.958 ms
24 old.columbia.university (128.59.105.24) 246.820 ms 246.645 ms 246.758 ms

```
z5261703@vx4:~$ ping 113.197.15.4
PING 113.197.15.4 (113.197.15.4) 56(84) bytes of data.
64 bytes from 113.197.15.4: icmp_seq=1 ttl=58 time=1.60 ms
64 bytes from 113.197.15.4: icmp_seq=2 ttl=58 time=1.60 ms
^C
--- 113.197.15.4 ping statistics ---
2 packets transmitted, 2 received, 0% packet loss, time 1001ms
rtt min/avg/max/mdev = 1.607/1.607/1.608/0.040 ms
z5261703@vx4:~$ ^C
z5261703@vx4:~$ ping 113.197.14.137
PING 113.197.14.137 (113.197.14.137) 56(84) bytes of data.
64 bytes from 113.197.14.137: icmp_seq=1 ttl=58 time=71.6 ms
64 bytes from 113.197.14.137: icmp_seq=2 ttl=58 time=71.4 ms
64 bytes from 113.197.14.137: icmp_seq=3 ttl=58 time=71.6 ms
^C
--- 113.197.14.137 ping statistics ---
3 packets transmitted, 3 received, 0% packet loss, time 2003ms
rtt min/avg/max/mdev = 71.487/71.595/71.651/0.318 ms
```

Answer:

24 routers in total. 4 routers along the path are part of the UNSW network. Between **7 et-1-1-0.pe1.mcqp.nsw.aarnet.net.au (113.197.15.4)** and **8 et-0_0_2.bdr1.guam.gum.aarnet.net.au (113.197.14.137)** the packets cross the Pacific Ocean. Because the rtt (round trip time) from my machine to router 7 is 1.607 mins and to router 8 is 71.487 mins, which indicates there is a long distance between router 7 and 8.

2.

(i) www.ucla.edu

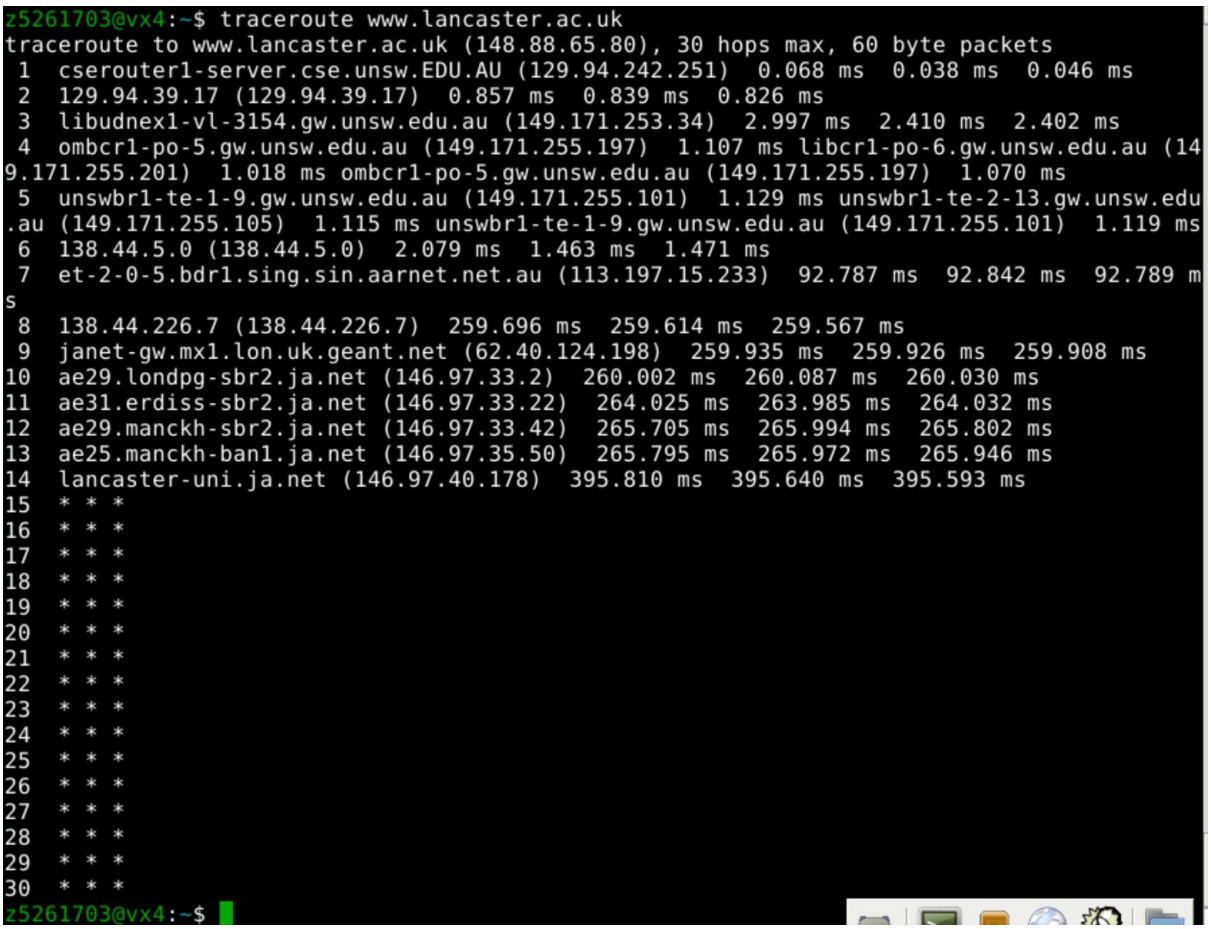
```
z5261703@vx4:~$ traceroute www.ucla.edu
traceroute to www.ucla.edu (13.226.230.6), 30 hops max, 60 byte packets
 1  cserouter1-server.cse.unsw.EDU.AU (129.94.242.251)  0.078 ms  0.055 ms  0.05
4 ms
 2  129.94.39.17 (129.94.39.17)  0.886 ms  0.847 ms  0.845 ms
 3  libudnex1-vl-3154.gw.unsw.edu.au (149.171.253.34)  1.868 ms  2.730 ms  2.795
 ms
 4  libcr1-po-5.gw.unsw.edu.au (149.171.255.165)  1.084 ms  1.104 ms libcr1-po-6
.gw.unsw.edu.au (149.171.255.201)  1.102 ms
 5  unswbr1-te-1-9.gw.unsw.edu.au (149.171.255.101)  1.146 ms  1.134 ms  1.142 m
s
 6  138.44.5.0 (138.44.5.0)  1.309 ms  1.283 ms  1.268 ms
 7  et-0-3-0.pe1.bkvl.nsw.aarnet.net.au (113.197.15.147)  3.196 ms  3.689 ms  3.
685 ms
 8  xe-0-2-5.bdr1.b.sea.aarnet.net.au (202.158.194.121)  144.419 ms  144.356 ms
 144.336 ms
 9  xe-4-1-1.mpr1.sea1.us.above.net (64.125.193.129)  146.599 ms  146.606 ms  14
6.624 ms
10  ae28.cs2.sea1.us.eth.zayo.com (64.125.29.104)  159.138 ms ae27.cs1.sea1.us.e
th.zayo.com (64.125.29.0)  158.460 ms ae28.cs2.sea1.us.eth.zayo.com (64.125.29.1
04)  159.117 ms
11  ae3.cs2.sjc2.us.eth.zayo.com (64.125.29.40)  159.558 ms ae3.cs1.sjc2.us.eth.
zayo.com (64.125.29.42)  158.534 ms  159.403 ms
12  ae2.cs1.lax112.us.eth.zayo.com (64.125.28.145)  158.583 ms ae2.cs2.lax112.us
.eth.zayo.com (64.125.28.197)  160.024 ms  159.960 ms
13  * * *
14  99.83.64.190 (99.83.64.190)  159.150 ms  158.904 ms  158.862 ms
15  150.222.234.39 (150.222.234.39)  160.158 ms 150.222.234.53 (150.222.234.53)  160.078
ms 150.222.234.51 (150.222.234.51)  160.055 ms
16  54.239.102.208 (54.239.102.208)  159.819 ms 54.239.102.234 (54.239.102.234)  159.778
ms 54.239.102.198 (54.239.102.198)  159.173 ms
17  * 52.93.92.85 (52.93.92.85)  162.226 ms 150.222.252.83 (150.222.252.83)  162.927 ms
18  * * *
19  * * *
```

```
20  * * *
21  * * *
22  * * *
23  150.222.101.78 (150.222.101.78)  159.381 ms * 150.222.101.126 (150.222.101.126)  159.
400 ms
24  150.222.232.43 (150.222.232.43)  159.295 ms 150.222.232.39 (150.222.232.39)  159.287
ms 150.222.232.43 (150.222.232.43)  159.225 ms
25  * * 150.222.232.45 (150.222.232.45)  159.209 ms
26  * * *
27  * * *
28  * * *
29  * * *
30  * * *
z5261703@vx4:~$
```

(ii) www.u-tokyo.ac.jp

```
traceroute to www.u-tokyo.ac.jp (210.152.243.234), 30 hops max, 60 byte packets
 1  cserouter1-server.cse.unsw.EDU.AU (129.94.242.251)  0.109 ms  0.077 ms  0.053 ms
 2  129.94.39.17 (129.94.39.17)  0.840 ms  0.845 ms  0.801 ms
 3  libudnex1-vl-3154.gw.unsw.edu.au (149.171.253.34)  1.921 ms  1.909 ms ombudnex1-vl-31
54.gw.unsw.edu.au (149.171.253.35)  5.436 ms
 4  ombcr1-po-5.gw.unsw.edu.au (149.171.255.197)  1.100 ms  1.146 ms  1.173 ms
 5  unswbr1-te-2-13.gw.unsw.edu.au (149.171.255.105)  1.128 ms unswbr1-te-1-9.gw.unsw.edu
.au (149.171.255.101)  1.198 ms  1.186 ms
 6  138.44.5.0 (138.44.5.0)  1.314 ms  1.309 ms  1.303 ms
 7  et-0-3-0.pe1.bkvl.nsw.aarnet.net.au (113.197.15.147)  1.884 ms  1.879 ms  1.918 ms
 8  ge-4_0_0.bb1.a.pao.aarnet.net.au (202.158.194.177)  149.035 ms  149.471 ms  149.447 m
s
 9  paloalto0.iij.net (198.32.176.24)  149.784 ms  149.679 ms  149.811 ms
10  osk004bb00.IIJ.Net (58.138.88.185)  279.375 ms osk004bb01.IIJ.Net (58.138.88.189)  25
9.864 ms osk004bb00.IIJ.Net (58.138.88.185)  279.335 ms
11  osk004ip57.IIJ.Net (58.138.106.194)  269.809 ms osk004ip57.IIJ.Net (58.138.106.162)
279.198 ms osk004ip57.IIJ.Net (58.138.106.194)  269.778 ms
12  210.130.135.130 (210.130.135.130)  269.826 ms  269.810 ms  269.843 ms
13  124.83.228.58 (124.83.228.58)  273.756 ms  279.411 ms  269.877 ms
14  124.83.252.178 (124.83.252.178)  274.713 ms  274.512 ms  274.427 ms
15  158.205.134.26 (158.205.134.26)  265.880 ms  275.634 ms  275.584 ms
16  * * *
17  * * *
18  * * *
19  * * *
20  * * *
21  * * *
22  * * *
23  * * *
24  * * *
25  * * *
26  * * *
27  * * *
28  * * *
29  * * *
30  * * *
```

(iii) www.lancaster.ac.uk



Answer part 1:
At 138.44.5.0, the paths from my machine to the three destinations diverge.
This router is the Australian Academic and Research Network Building 9 Banks Street.
See below part of the output from command whois 138.44.5.0.

% Information related to '138.44.5.0/24AS7575'

route: 138.44.5.0/24
origin: AS7575
descr: Australian Academic and Research Network
Building 9
Banks Street
mnt-by: MAINT-AARNET-AP
last-modified: 2019-04-03T03:55:51Z
source: APNIC

% This query was served by the APNIC Whois Service version 1.88.15-SNAPSHOT (WHOIS-AU2)

Answer part 2:

Destination Site	No. of hops	Physical Distance (Miles)

(i) www.ucla.edu	13	6524.2
(ii) www.u-tokyo.ac.jp	9	4913.8
(iii) www.lancaster.ac.uk	8	9004.3

No, it doesn't seem that the number of hops on each path is proportional to the physical distance.

3.

(i) http://www.speedtest.com.sg/tr.php
(ii) https://www.telstra.net/cgi-bin/trace
My current IP address: 125.63.26.225 (detected from https://www.yougetsignal.com/tools/network-location/)

From (i) to my machine:

```
Traceroute Result:

traceroute to 125.63.26.225 (125.63.26.225), 30 hops max, 60 byte packets
 1  ge2-8.r01.sin01.ne.com.sg (202.150.221.169)  0.157 ms  0.160 ms  0.196 ms
 2  10.11.34.146 (10.11.34.146)  0.395 ms  0.426 ms  0.485 ms
 3  superloop.sgix.sg (103.16.102.76)  1.463 ms  1.504 ms  1.476 ms
 4  hundredgige0-0-1-2-131.bdr01-ipt-1william-per.au.superloop.net.co (202.177.40.21)  92.632 ms  92.644 ms *
 5  hundredgige0-0-1-2-128.bdr01-ipt-47bourke-syd.au.superloop.net.co (103.200.13.188)  92.590 ms  92.597 ms  92.479 ms
 6  * * *
 7  * * *
 8  * * *
 9  * * *
10  * * *
11  * * *
12  * * *
13  * * *
14  * * *
15  * * *
16  * * *
17  * * *
18  * * *
19  * * *
20  * * *
21  * * *
22  * * *
23  * * *
24  * * *
25  * * *
26  * * *
27  * * *
28  * * *
29  * * *
30  * * *

Traceroute Completed.
```

From (ii) to my machine:

```
1  gigabitethernet3-3.exi2.melbourne.telstra.net (203.50.77.53)  0.856 ms  0.721 ms  0.870 ms
2  TenGigE0-0-0-21.win-dlr20.melbourne.telstra.net (203.50.233.148)  1.118 ms  0.863 ms  0.871 ms
3  bundle-ether30.win-core10.melbourne.telstra.net (203.50.11.248)  2.369 ms  1.736 ms  2.494 ms
4  bundle-ether1.win-edge902.melbourne.telstra.net (203.50.11.110)  0.745 ms  0.739 ms  0.745 ms
5  ape2466697.lnk.telstra.net (120.151.79.62)  0.870 ms  0.739 ms *
6  hundredgige0-0-1-3.bdr01-ipt-530colli-mel.au.superloop.net.co (103.200.13.101)  12.109 ms
7  hundredgige0-0-1-2-106.bdr01-ipt-47bourke-syd.au.superloop.net.co (103.200.13.112)  11.988 ms  11.856 ms
```

From my machine to (i):

```
z5261703@vx4:~$ traceroute www.speedtest.com.sg
traceroute to www.speedtest.com.sg (202.150.221.170), 30 hops max, 60 byte packe
ts
 1  cserouter1-server.cse.unsw.EDU.AU (129.94.242.251)  0.094 ms  0.048 ms  0.04
1 ms
 2  129.94.39.17 (129.94.39.17)  0.892 ms  0.937 ms  0.940 ms
 3  libudnex1-vl-3154.gw.unsw.edu.au (149.171.253.34)  4.811 ms  6.015 ms ombudn
ex1-vl-3154.gw.unsw.edu.au (149.171.253.35)  1.720 ms
 4  ombcr1-po-5.gw.unsw.edu.au (149.171.255.197)  1.138 ms ombcr1-po-6.gw.unsw.e
du.au (149.171.255.169)  1.125 ms libcr1-po-6.gw.unsw.edu.au (149.171.255.201)
1.061 ms
 5  unswbr1-te-2-13.gw.unsw.edu.au (149.171.255.105)  1.136 ms unswbr1-te-1-9.gw
.unsw.edu.au (149.171.255.101)  1.082 ms unswbr1-te-2-13.gw.unsw.edu.au (149.171
.255.105)  1.138 ms
 6  138.44.5.0 (138.44.5.0)  1.340 ms  1.357 ms  1.265 ms
 7  et-0-3-0.pe1.alxd.nsw.aarnet.net.au (113.197.15.153)  1.711 ms  1.661 ms  1.
756 ms
 8  xe-0-2-7.bdr1.a.lax.aarnet.net.au (202.158.194.173)  147.772 ms  147.704 ms
 147.685 ms
 9  singtel.as7473.any2ix.coresite.com (206.72.210.63)  147.649 ms  147.638 ms
147.728 ms
10  203.208.171.117 (203.208.171.117)  148.005 ms 203.208.172.133 (203.208.172.1
33)  329.012 ms 203.208.171.117 (203.208.171.117)  148.151 ms
11  203.208.177.110 (203.208.177.110)  331.658 ms  328.447 ms 203.208.172.145 (2
03.208.172.145)  246.042 ms
12  203.208.182.253 (203.208.182.253)  331.109 ms 203.208.158.17 (203.208.158.17
)  326.507 ms  327.091 ms
13  202-150-221-170.rev.ne.com.sg (202.150.221.170)  208.923 ms 203.208.158.185
(203.208.158.185)  322.295 ms  322.266 ms
```

From my machine to (ii):

```
z5261703@vx4:~$ traceroute www.telstra.net
traceroute to www.telstra.net (203.50.5.178), 30 hops max, 60 byte packets
 1  cserouter1-server.cse.unsw.EDU.AU (129.94.242.251)  0.100 ms  0.072 ms  0.043 ms
 2  129.94.39.17 (129.94.39.17)  0.875 ms  0.863 ms  0.834 ms
 3  ombudnex1-vl-3154.gw.unsw.edu.au (149.171.253.35)  6.793 ms  6.786 ms libudnex1-
vl-3154.gw.unsw.edu.au (149.171.253.34)  1.696 ms
 4  ombcr1-po-5.gw.unsw.edu.au (149.171.255.197)  1.091 ms libcr1-po-6.gw.unsw.edu.a
u (149.171.255.201)  1.037 ms ombcr1-po-5.gw.unsw.edu.au (149.171.255.197)  1.066 ms
 5  unswbr1-te-1-9.gw.unsw.edu.au (149.171.255.101)  1.076 ms unswbr1-te-2-13.gw.uns
w.edu.au (149.171.255.105)  1.102 ms  1.111 ms
 6  138.44.5.0 (138.44.5.0)  1.273 ms  1.202 ms  1.232 ms
 7  et-1-1-0.pe1.rsby.nsw.aarnet.net.au (113.197.15.12)  1.926 ms  1.924 ms  1.899 m
s
 8  xe-0-0-3.bdr1.rsby.nsw.aarnet.net.au (113.197.15.31)  1.469 ms  1.732 ms  1.646
ms
 9  139.130.0.77 (139.130.0.77)  2.345 ms  2.337 ms  2.313 ms
10  bundle-ether17.ken-core10.sydney.telstra.net (203.50.11.172)  2.259 ms  3.075 ms
  3.230 ms
11  bundle-ether10.win-core10.melbourne.telstra.net (203.50.11.123)  14.996 ms bundl
e-ether17.chw-core10.sydney.telstra.net (203.50.11.176)  2.531 ms  4.210 ms
12  bundle-ether8.exi-core10.melbourne.telstra.net (203.50.11.125)  15.623 ms bundle
-ether1-2.exi-core10.melbourne.telstra.net (203.50.6.40)  15.627 ms bundle-ether8.ex
i-core10.melbourne.telstra.net (203.50.11.125)  15.387 ms
13  203.50.11.209 (203.50.11.209)  15.067 ms  15.205 ms  14.978 ms
14  www.telstra.net (203.50.5.178)  14.283 ms  13.525 ms  14.359 ms
```

Answer:

The IP addresses of the two servers that I have chosen are (i) 202.150.221.170 and (ii) 203.50.5.178.

No, the reverse-path doesn't go through the same routers as the forward path. Yes, I observe common routers between the forward and the reverse path for (ii), but the IP addresses for those common routers are different (see table below).

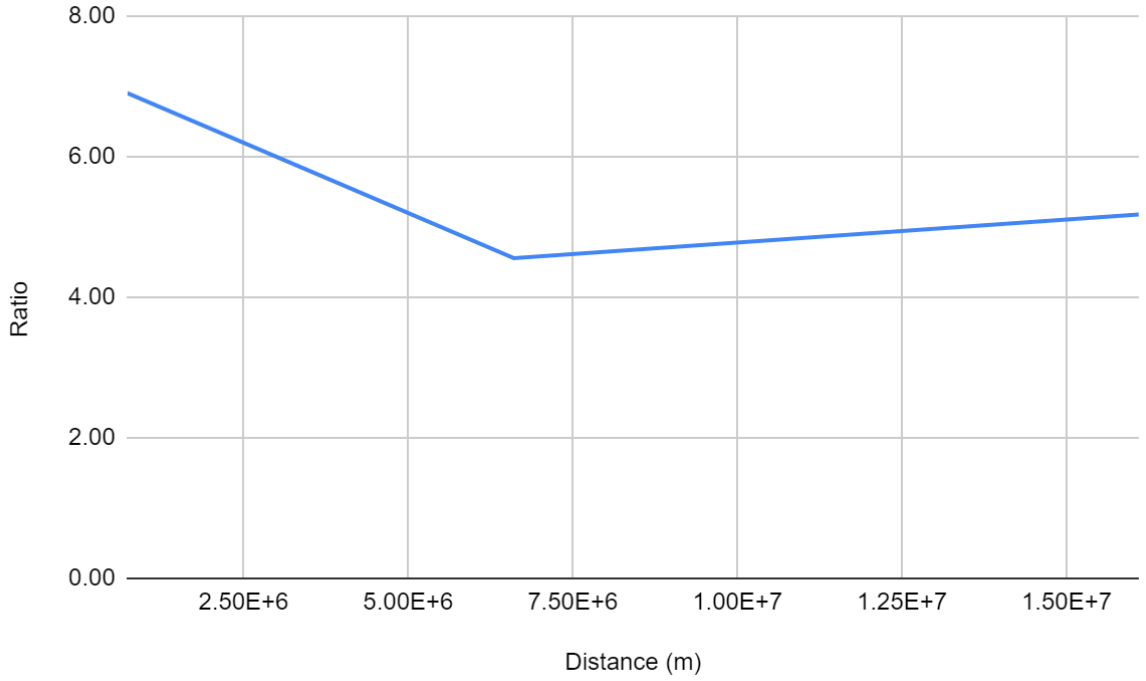
Forward path router name/IP address	Reverse path router name/IP address
3 bundle-ether30.win-core10.melbourne.telstra.net (203.50.11.248)	12 bundle-ether8.exi-core10.melbourne.telstra.net (203.50.11.125)
4 bundle-ether1.win-edge902.melbourne.telstra.net (203.50.11.110)	11 bundle-ether10.win-core10.melbourne.telstra.net (203.50.11.123)

This is because each router makes its own decision about the next hop for a best (fastest) path based on real-time situation and doesn't know about the path another packet took in the same conversion.

Exercise 4:

1.

Website	Physical distance from UNSW (km)	Shortest Possible time T (ms)	Minimum delay (RTT) (ms)	Ratio (Min RTT/T)
www.uq.edu.au	736.61	2.46	16.958	6.91
www.upm.edu.my	6,604.24	22.01	100.338	4.56
www.tu-berlin.de	16,096.53	53.66	277.937	5.18



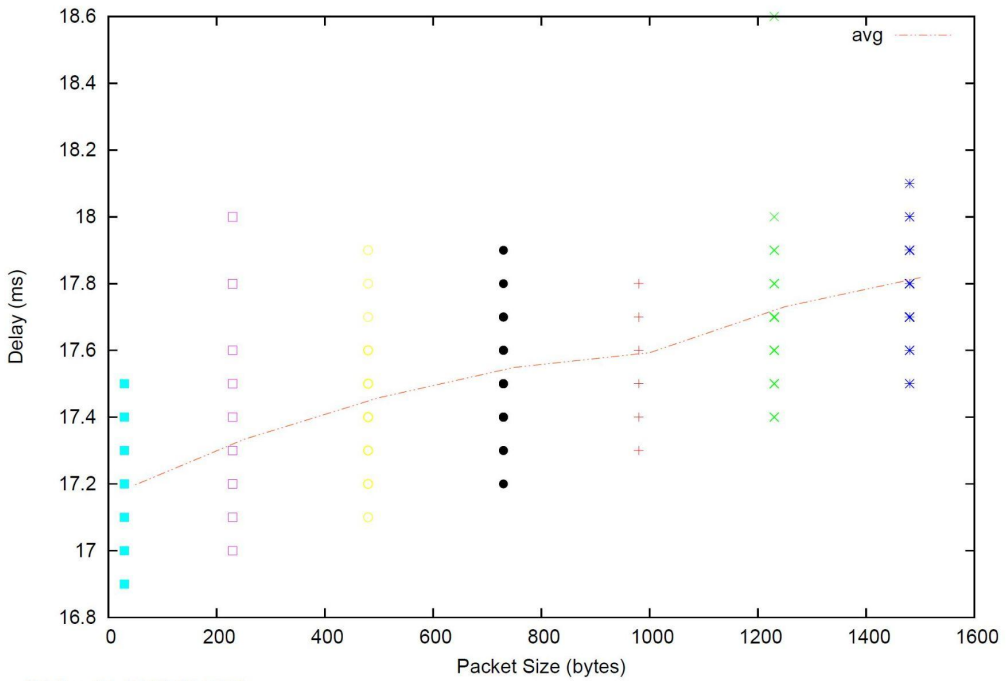
Reasons why the y-axis values in the graph above are greater than 2:

- There may be large queuing delays between hops.
- Since the physical distance or the length of the physical link is very big, correspondingly the propagation delay is very big.

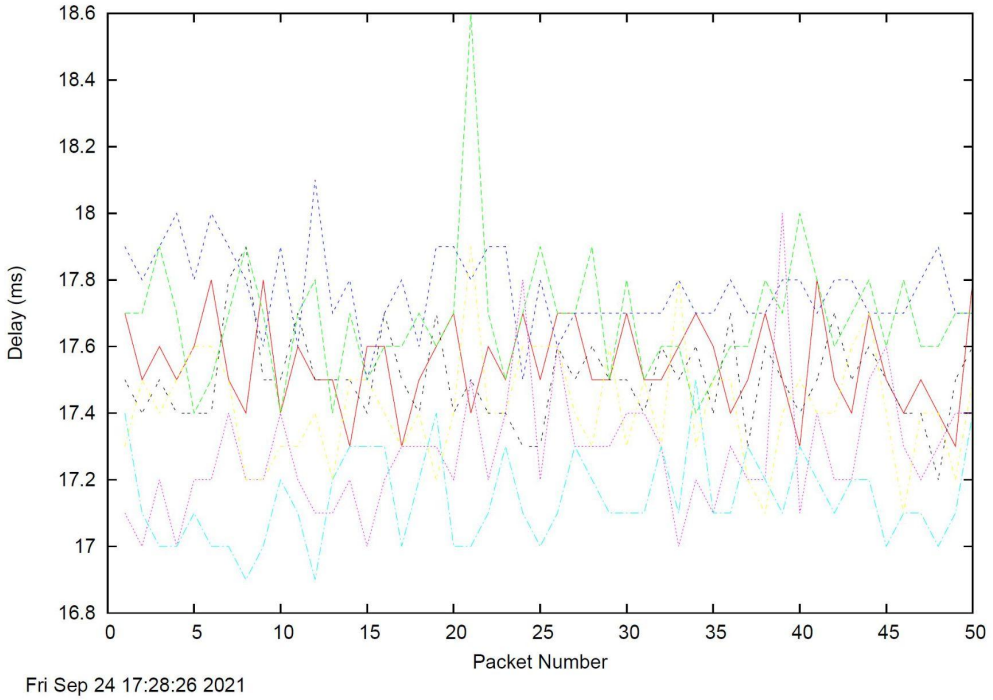
2. The delays to the destinations vary over time. This is because everytime a packet is transmitted along the physical link, the hops (path) might be different from last time, leading to differences in the processing, queuing, transmission and propagation delays. Additionally, the queueing delay depends on the congestion level of the network and if many people are using the network at the same time and there are many packets, the queuing delay will be larger.

Scatter plots and delay graphs:

www.uq.edu.au

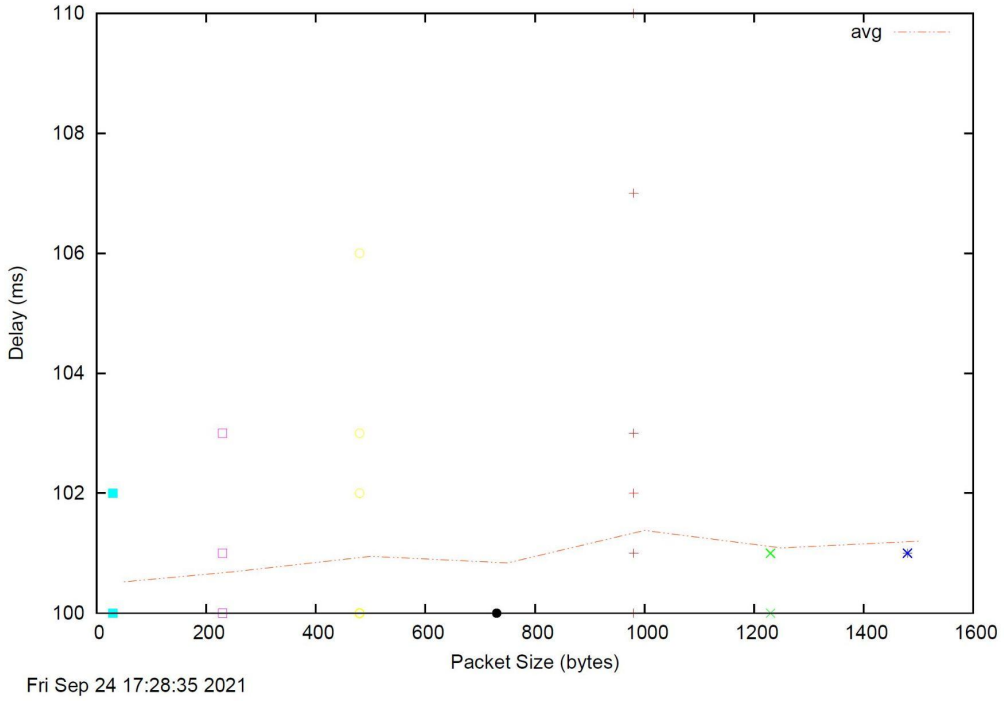


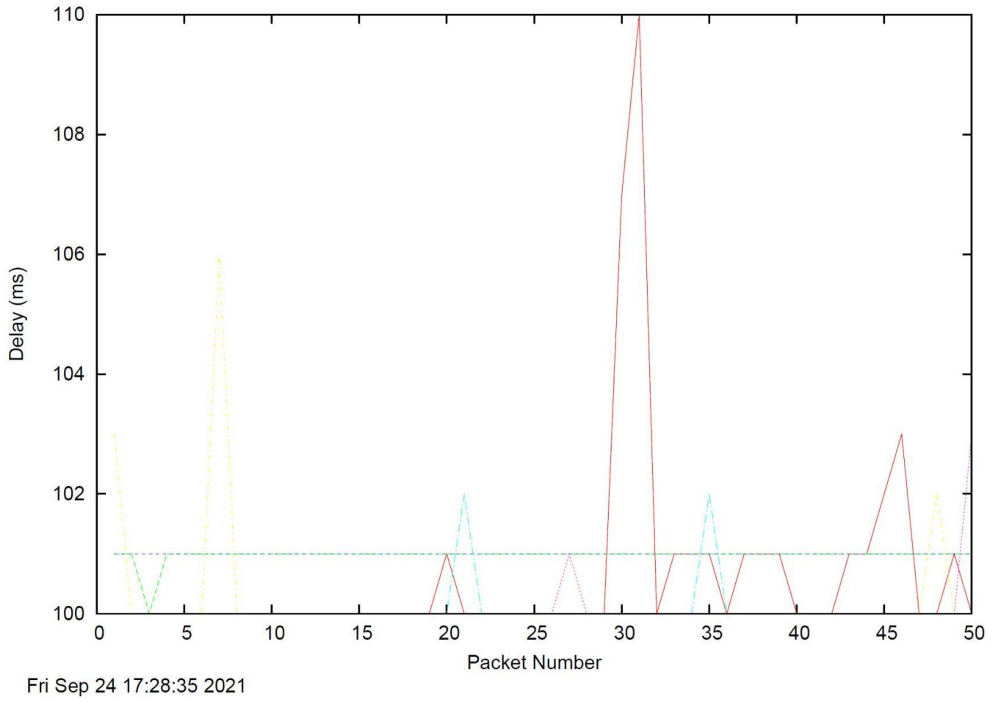
Fri Sep 24 17:28:26 2021



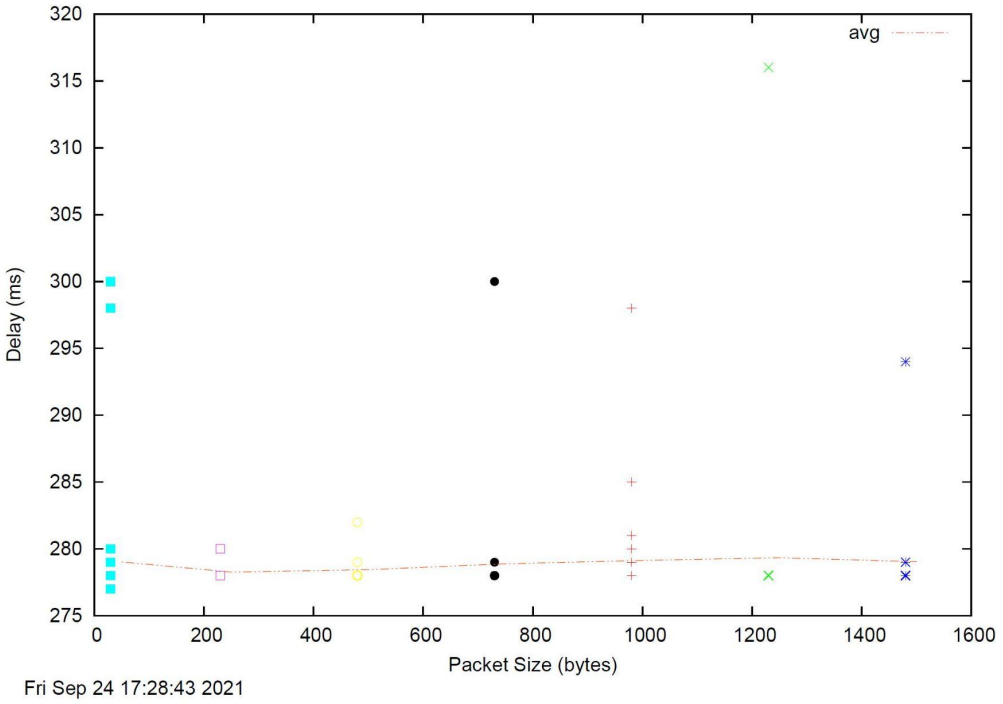
Fri Sep 24 17:28:26 2021

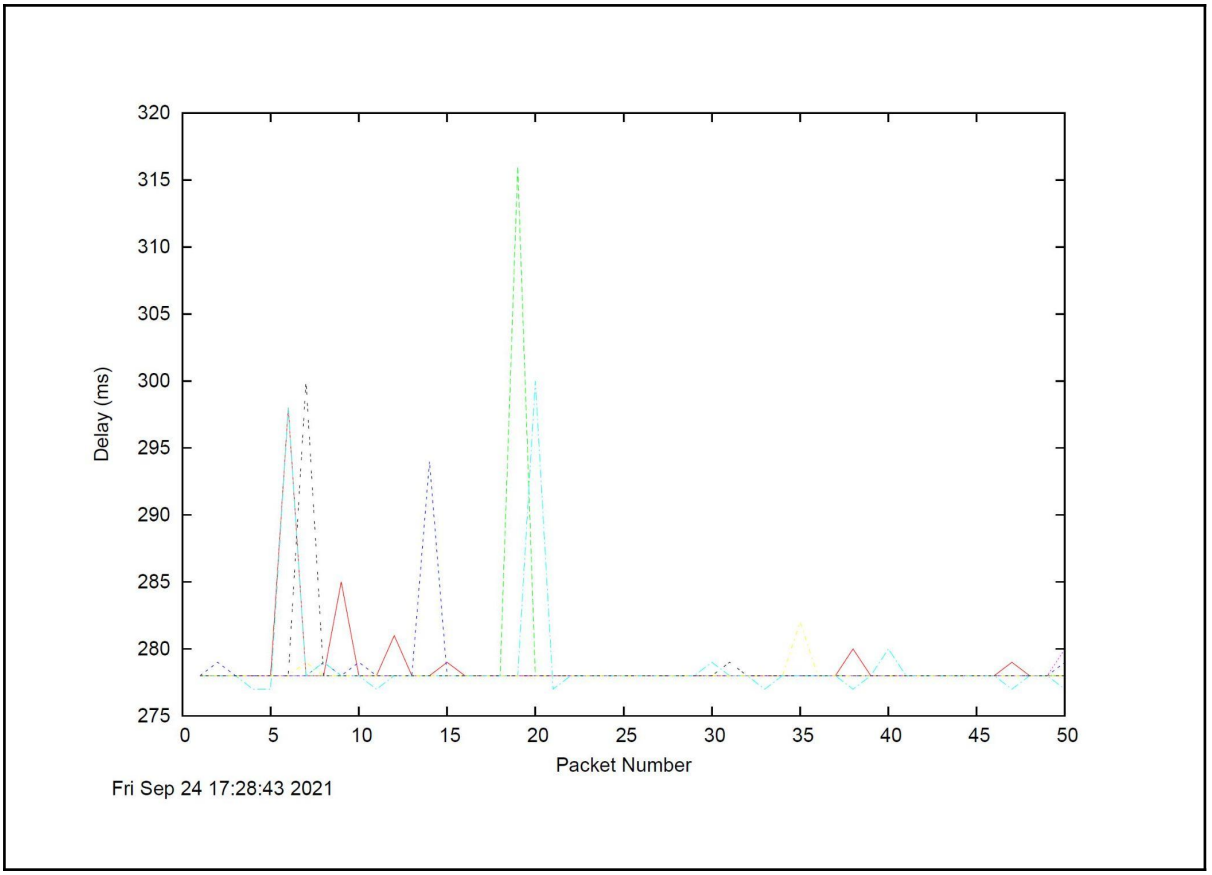
www.upm.edu.my





www.tu-berlin.de





3. The IP address for this website is 104.20.228.42 (nslookup) and maybe 172.67.2.106 (traceroute). www.epfl.ch is not in Switzerland but in the United States.

```
z5261703@vx8:/tmp_amd/adams/export/adams/4/z5261703$ nslookup  www.epfl.ch
Server:         129.94.242.2
Address:        129.94.242.2#53

Non-authoritative answer:
www.epfl.ch     canonical name = www.epfl.ch.cdn.cloudflare.net.
Name:   www.epfl.ch.cdn.cloudflare.net
Address: 104.20.229.42
Name:   www.epfl.ch.cdn.cloudflare.net
Address: 104.20.228.42
Name:   www.epfl.ch.cdn.cloudflare.net
Address: 172.67.2.106
```

```
z5261703@vx8:/tmp_amd/adams/export/adams/4/z5261703$ traceroute www.epfl.ch
traceroute to www.epfl.ch (104.20.228.42), 30 hops max, 60 byte packets
 1  cserouter1-server.cse.unsw.EDU.AU (129.94.242.251)  0.062 ms  0.056 ms  0.09
1 ms
 2  129.94.39.17 (129.94.39.17)  0.870 ms  0.830 ms  0.869 ms
 3  libudnex1-vl-3154.gw.unsw.edu.au (149.171.253.34)  1.381 ms ombudnex1-vl-315
4.gw.unsw.edu.au (149.171.253.35)  12.140 ms  12.092 ms
 4  libcr1-po-5.gw.unsw.edu.au (149.171.255.165)  1.051 ms ombcr1-po-6.gw.unsw.e
du.au (149.171.255.169)  1.315 ms ombcr1-po-5.gw.unsw.edu.au (149.171.255.197)
1.236 ms
 5  unswbr1-te-2-13.gw.unsw.edu.au (149.171.255.105)  1.130 ms  1.138 ms unswbr1
-te-1-9.gw.unsw.edu.au (149.171.255.101)  1.124 ms
 6  138.44.5.0 (138.44.5.0)  1.284 ms  1.253 ms  1.255 ms
 7  et-0-1-0.bdr1.msct.nsw.aarnet.net.au (113.197.15.109)  1.392 ms  1.445 ms  1
.400 ms
 8  as13335.nsw.ix.asn.au (218.100.52.11)  2.242 ms  2.233 ms  2.182 ms
 9  104.20.228.42 (104.20.228.42)  1.667 ms  1.626 ms  1.669 ms
```

IP Lookup Result

Share The Result

Permalink	https://www.ip2location.com/172.67.2.106
IP Address	172.67.2.106
Country	United States of America [US]
Region	California
City	San Francisco
Coordinates of City	37.775700, -122.395200 (37°46'33"N 122°23'43"W)
ISP	CloudFlare Inc.
Local Time	26 Sep, 2021 06:45 AM (UTC -07:00)
Domain	cloudflare.com
Net Speed	(COMP) Company/T1
IDD & Area Code	(1) 415
ZIP Code	94107
Weather Station	San Francisco (USCA0987)

IP Lookup Result

Share The Result

Permalink	https://www.ip2location.com/104.20.228.42
IP Address	104.20.228.42
Country	United States of America [US]
Region	California
City	San Francisco
Coordinates of City	37.775700, -122.395200 (37°46'33"N 122°23'43"W)
ISP	CloudFlare Inc.
Local Time	26 Sep, 2021 06:59 AM (UTC -07:00)
Domain	cloudflare.com
Net Speed	(COMP) Company/T1
IDD & Area Code	(1) 415
ZIP Code	94107
Weather Station	San Francisco (USCA0987)

4. Transmission delay depends on the packet size. Propagation delay, queuing delay and processing delay do not depend on packet size.