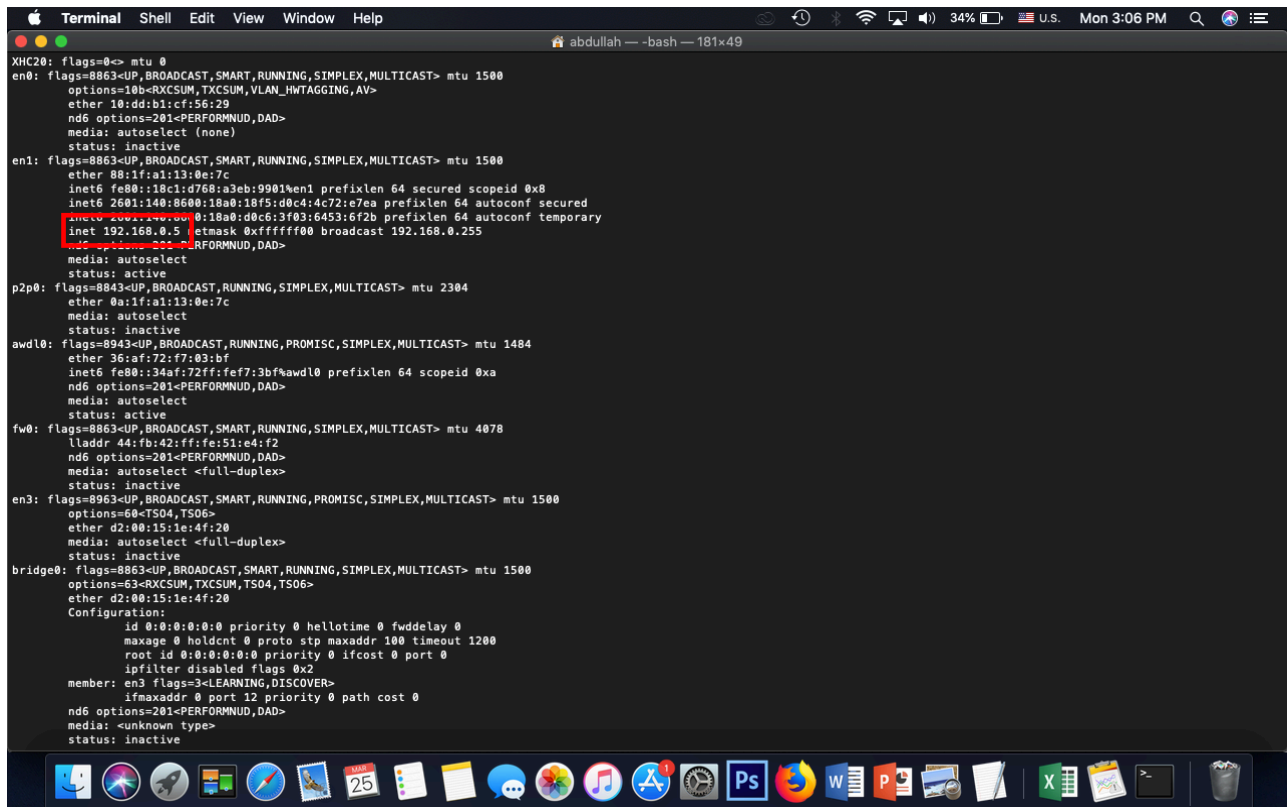


Abdullah Alrfeedi
Lab #5
IT-520

1. What is your computers IP address? (This is not included in your traceroute results). **Take a screenshot of your computers IP address. Your screenshot should indicate the time and date on your computer.**

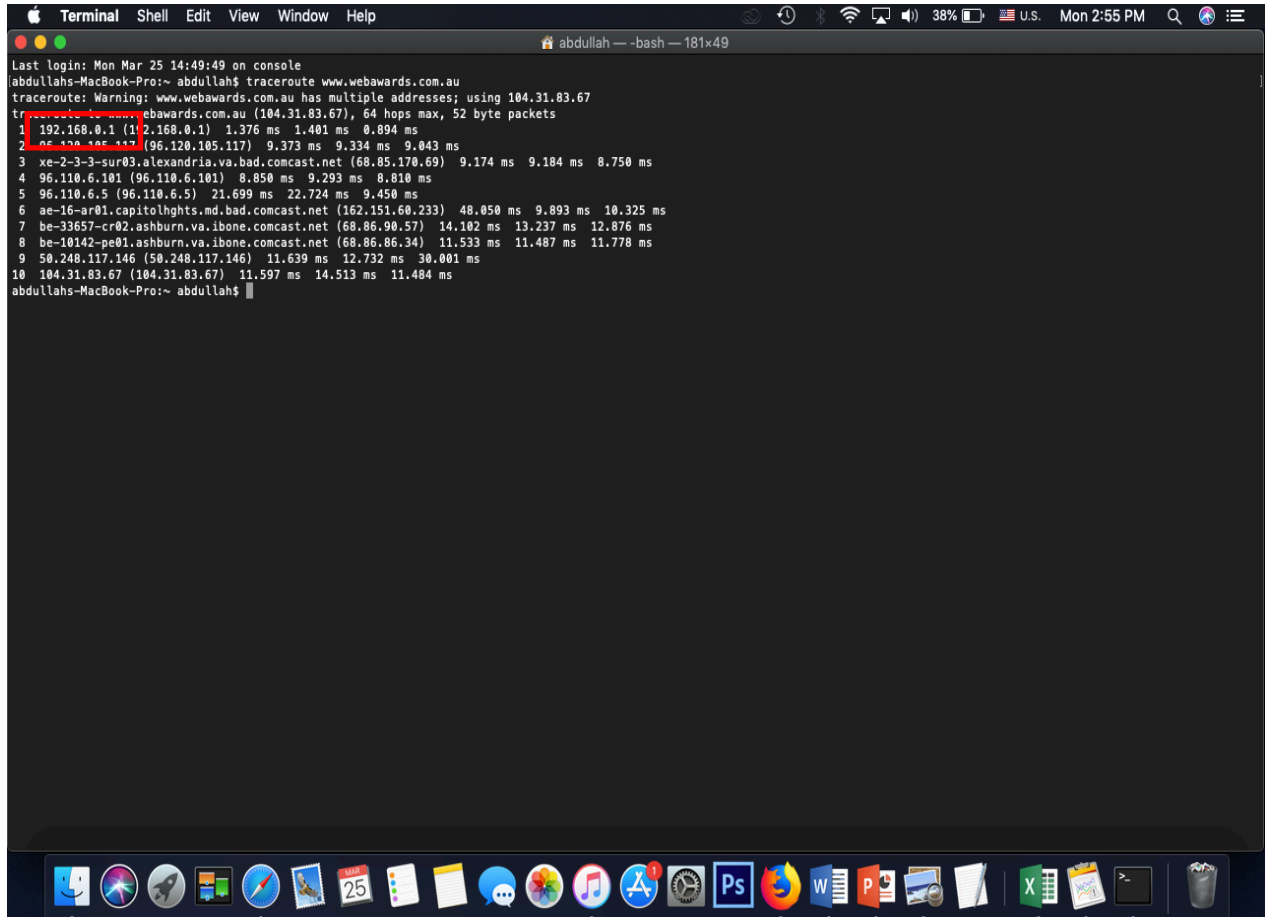
My IP address is 192.168.0.5



```
XHC20: flags=0<> mtu 0
en0: flags=8863<UP,BROADCAST,SMART,RUNNING,SIMPLEX,MULTICAST> mtu 1500
    options=10b<RXCSUM, TXCSUM, VLAN_HWTAGGING, AV>
    ether 10:dd:b1:cf:56:29
    nd6 options=201<PERFORMNUD,DAD>
    media: autoselect (none)
    status: inactive
en1: flags=8863<UP,BROADCAST,SMART,RUNNING,SIMPLEX,MULTICAST> mtu 1500
    ether 08:1f:a1:13:0e:7c
    inet6 fe80::10c1:d768:a3eb:9901%en1 prefixlen 64 secured scopeid 0x0
    inet6 2601:140:8600:18a0:18f5:d0c4:4c72:e7ea prefixlen 64 autoconf secured
    inet6 2001:::0:0:0:0:18a0:d0c6:3f03:6453:6f2b prefixlen 64 autoconf temporary
    inet 192.168.0.5 netmask 0xfffff000 broadcast 192.168.0.255
    nd6 options=201<PERFORMNUD,DAD>
    media: autoselect
    status: active
p2p0: flags=8843<UP,BROADCAST,RUNNING,SIMPLEX,MULTICAST> mtu 2304
    ether 0a:1f:a1:13:0e:7c
    media: autoselect
    status: inactive
awdl0: flags=8943<UP,BROADCAST,RUNNING,PROMISC,SIMPLEX,MULTICAST> mtu 1484
    ether 36:af:72:f7:03:bf
    inet6 fe80::34af:72ff:fef7:3bf%awdl0 prefixlen 64 scopeid 0xa
    nd6 options=201<PERFORMNUD,DAD>
    media: autoselect
    status: active
fw0: flags=8863<UP,BROADCAST,SMART,RUNNING,SIMPLEX,MULTICAST> mtu 4078
    lladdr 44:fb:42:ff:fe:51:e4:f2
    nd6 options=201<PERFORMNUD,DAD>
    media: autoselect <full-duplex>
    status: inactive
en3: flags=8963<UP,BROADCAST,SMART,RUNNING,PROMISC,SIMPLEX,MULTICAST> mtu 1500
    options=60<TS04,TS06>
    ether d2:00:15:1e:4f:20
    media: autoselect <full-duplex>
    status: inactive
bridge0: flags=8863<UP,BROADCAST,SMART,RUNNING,SIMPLEX,MULTICAST> mtu 1500
    options=63<RXCSUM, TXCSUM, TS04, TS06>
    ether d2:00:15:1e:4f:20
    Configuration:
        id 0:0:0:0:0:0 priority 0 hellotime 0 fwddelay 0
        maxage 0 holdcnt 0 proto stp maxaddr 100 timeout 1200
        root id 0:0:0:0:0:0 priority 0 ifcost 0 port 0
        ipfilter disabled flags 0x2
    member: en3 flags=3<LEARNING,DISCOVER>
        ifmaxaddr 0 port 12 priority 0 path cost 0
    nd6 options=201<PERFORMNUD,DAD>
    media: <unknown type>
    status: inactive
```

2. With reference to private/public IP addresses. What type of IP address is the first IP from your traceroute result.

The first one is Private IP address. (192.168.0.1)



```
Terminal Shell Edit View Window Help
abdullah - bash — 181x49
Last login: Mon Mar 25 14:49:49 on console
abdullahs-MacBook-Pro:~ abdullah$ tracert www.webawards.com.au
tracert: Warning: www.webawards.com.au has multiple addresses; using 104.31.83.67
tracert to www.webawards.com.au (104.31.83.67), 64 hops max, 52 byte packets
 1 192.168.0.1 (192.168.0.1)  1.376 ms  1.401 ms  0.894 ms
 2 ae-43a-4ac-473 (96.120.105.117)  9.373 ms  9.334 ms  9.043 ms
 3 xe-2-3-3-sur03.alexandria.va.bad.comcast.net (68.85.170.69)  9.174 ms  9.184 ms  8.750 ms
 4 96.110.6.101 (96.110.6.101)  8.850 ms  9.293 ms  8.810 ms
 5 96.110.6.5 (96.110.6.5)  21.699 ms  22.724 ms  9.450 ms
 6 ae-16-ar01.capitolhghts.md.bad.comcast.net (162.151.60.233)  48.050 ms  9.893 ms  10.325 ms
 7 be-33657-cr02.ashburn.va.lbone.comcast.net (68.86.90.57)  14.102 ms  13.237 ms  12.876 ms
 8 be-10142-pe01.ashburn.va.lbone.comcast.net (68.86.86.34)  11.533 ms  11.487 ms  11.778 ms
 9 50.248.117.146 (50.248.117.146)  11.639 ms  12.732 ms  30.001 ms
10 104.31.83.67 (104.31.83.67)  11.597 ms  14.513 ms  11.484 ms
abdullahs-MacBook-Pro:~ abdullah$
```

3. With reference to private/public IP addresses. What type of IP address is the second IP from your traceroute result.

The second IP address is public. (96.120.105.117)

```

Terminal Shell Edit View Window Help
abdullah — -bash — 181x49
Last login: Mon Mar 25 14:49:49 on console
abdullahs-MacBook-Pro:~ abdullah$ traceroute www.webawards.com.au
traceroute: Warning: www.webawards.com.au has multiple addresses; using 104.31.83.67
traceroute to www.webawards.com.au (104.31.83.67), 64 hops max, 52 byte packets
 1 100.100.0.1 (100.100.0.1) 1.376 ms 1.401 ms 0.894 ms
 2 96.120.105.117 (96.120.105.117) 9.373 ms 9.334 ms 9.043 ms
 3 ae-4-3-0-10000-alexandria.va.bad.comcast.net (68.85.170.69) 9.174 ms 9.184 ms 8.750 ms
 4 96.110.6.101 (96.110.6.101) 8.850 ms 9.293 ms 8.810 ms
 5 96.110.6.5 (96.110.6.5) 21.699 ms 22.724 ms 9.450 ms
 6 ae-16-ar01.capitolhgts.md.bad.comcast.net (162.151.60.233) 48.050 ms 9.893 ms 10.325 ms
 7 be-33657-cr02.ashburn.va.ibone.comcast.net (68.86.90.57) 14.102 ms 13.237 ms 12.076 ms
 8 be-10142-pe01.ashburn.va.ibone.comcast.net (68.86.86.34) 11.533 ms 11.487 ms 11.778 ms
 9 50.248.117.146 (50.248.117.146) 11.639 ms 12.732 ms 30.001 ms
10 104.31.83.67 (104.31.83.67) 11.597 ms 14.513 ms 11.484 ms
abdullahs-MacBook-Pro:~ abdullah$
```

4. In a tabular format (use table example below), and in sequential order. Indicate the location of each IP address (include state for US states) and the organization that owns the IP address. (Use <https://www.ultratools.com/tools/ipWhoisLookup> to look up IP address whois information). Add a row for every single IP in your traceroute result page.

Hop Count	IP address	Organization (IP Owner)	Location (US state)/Country
1	192.168.0.1	Internet Assigned Numbers Authority (IANA)	Los Angeles, CA USA
2	96.120.105.117	Comcast	Mt Laurel, NJ USA
3	68.85.170.69	Comcast	Mt Laurel, NJ USA
4	96.110.6.101	Comcast	Mt Laurel, NJ USA
5	96.110.6.5	Comcast	Mt Laurel, NJ USA
6	162.151.60.233	Comcast	Mt Laurel, NJ USA
7	68.86.90.57	Comcast	Mt Laurel, NJ USA
8	68.86.86.34	Comcast	Mt Laurel, NJ USA
9	50.248.117.146	Comcast	Mt Laurel, NJ USA
10	104.31.83.67	Cloudflare, Inc.	San Francisco, CA USA

5. In your own words, explain everything you just did, and what route did your packet took from source to destination. How many US states did your packet go through? How many countries if any?

Using traceroute, I pinged the given IP address which hopped first hit IANA in Los Angeles, USA. It then came back to Virginia and went through Comcast in Maryland 8 times. It then finally reached San Francisco as its final 'destination.'