

Networks Homework 8

Problem A

a.) Interface 1: 172.20.0.1
Interface 2: 192.162.30.79

Host A: 172.20.0.2 Host C: 172.20.0.4
Host B: 172.20.0.3

b.) ① S: 172.20.0.3, 4567
D: 34.182.19.20, 80

② S: 192.162.30.79, 5001
D: 34.182.19.20, 80

③ S: 34.182.19.20, 80
D: 192.162.30.79, 5001

④ S: 34.182.19.20, 80
D: 172.20.0.3, 4567

Problem B:

a.) No, only the Hop IP addresses are

b.) 216.58.217.4 and it is public

c.) www.google.com is the alias name and the other address is the Canonical name

d.) 10 routers

e.) Initial TTL is 7 and the destination is still 216.58.217.4

f.) The router sends ICMP messages with the following info:

Type: 11, Code: 0, Source: 192.43.217.170,

destination: Your Computer's IP address

g.) The final TTL is 1 and the dest. IP is the webserver's.

It then sends ICMP messages back with the following info:

type: 3, Code: 3, Source: 216.58.217.4,

destination is your Computer's IP address

Problem C

link 1: ① IPv6
② IP1
③ IP10

link 2: ① IPv4
② IP3
③ IP8

link 3: ① IPv4
② IP3
③ IP8

link 4: ① IPv4
② IP3
③ IP8

link 5: ① IPv6
② IP1
③ IP10