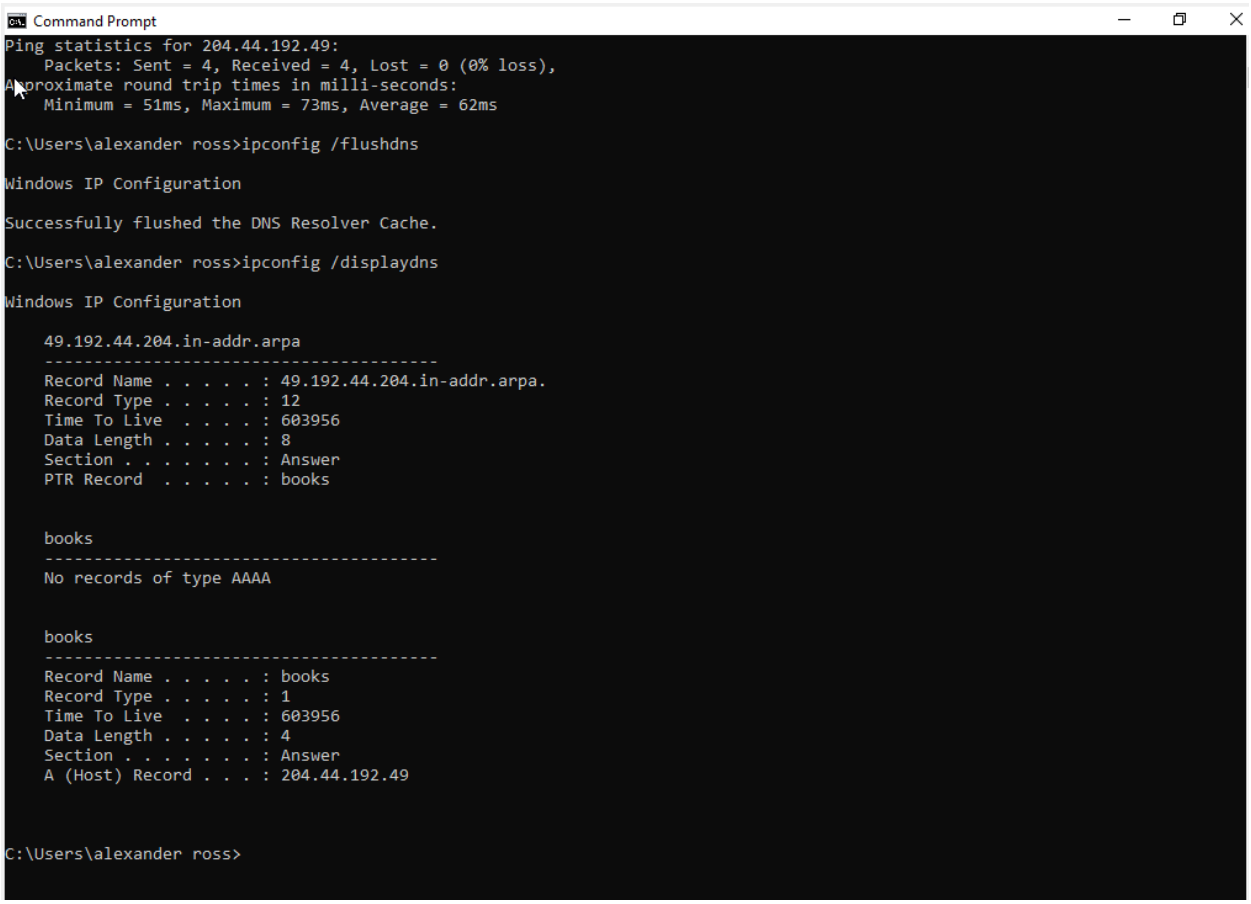
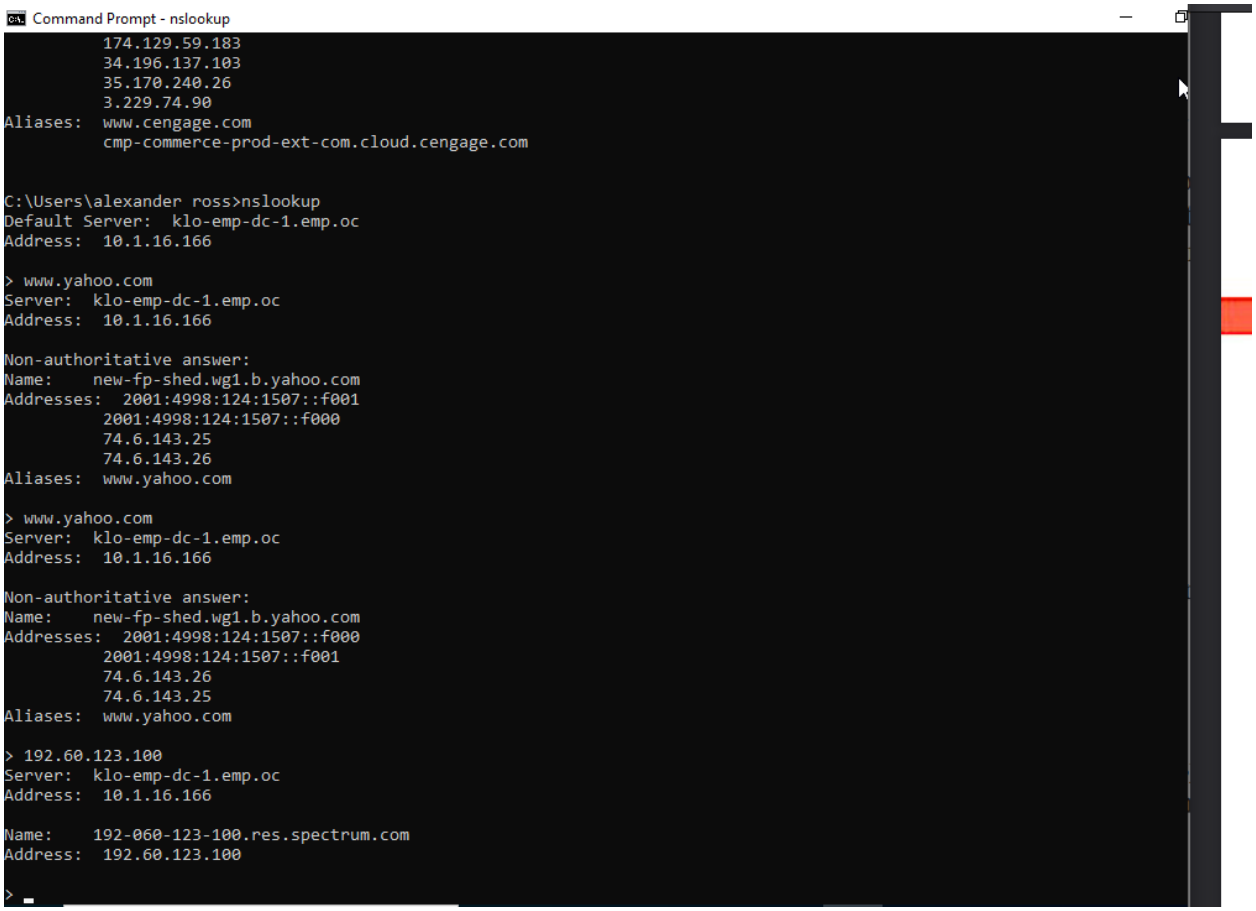
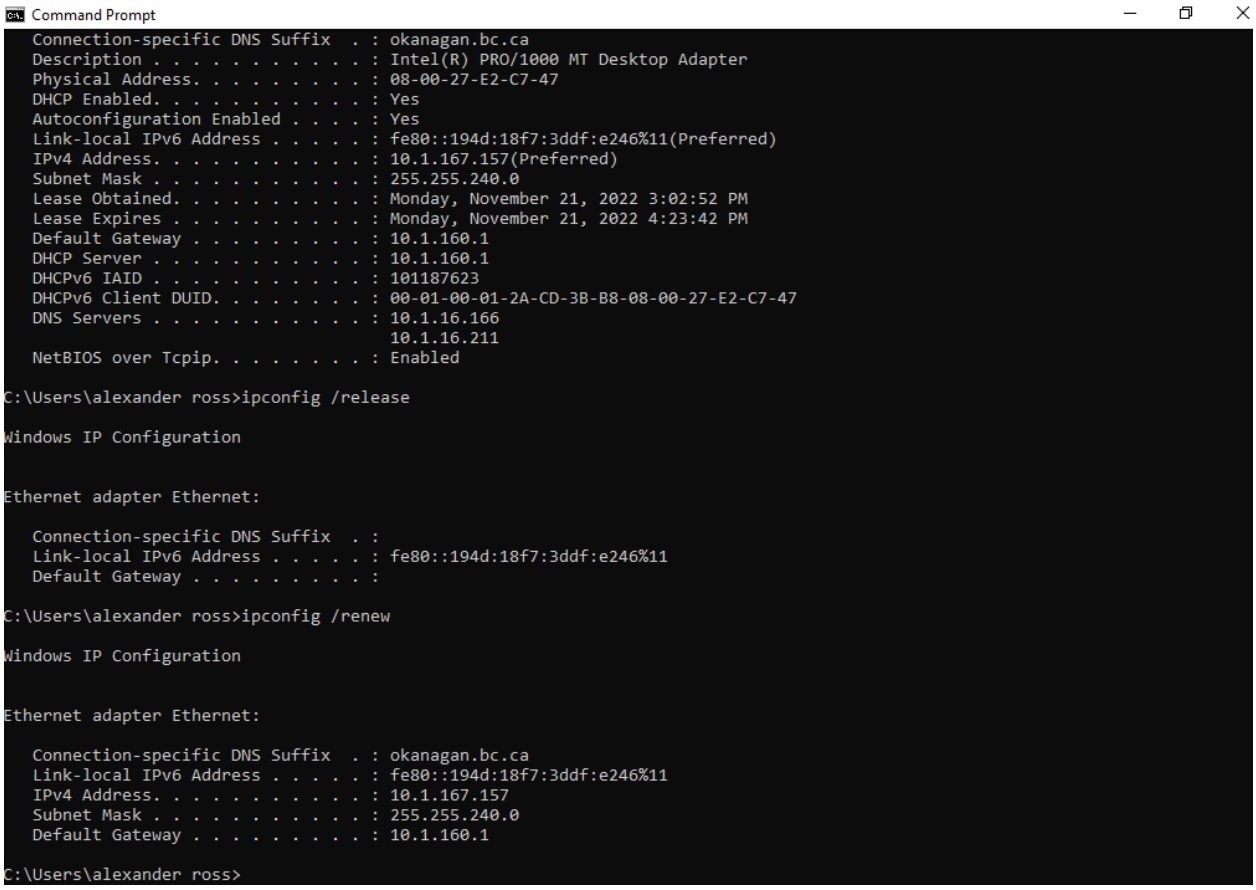
Hands On Project
Alexander Ross
300213662
5-3 1



5-3 2


Command Prompt - nslookup
174.129.59.183
34.196.137.103
35.170.240.26
3.229.74.90
Aliases: www.cengage.com
cmp-commerce-prod-ext-com.cloud.cengage.com
C:\Users\alexander ross>nslookup
Default Server: klo-emp-dc-1.emp.oc
Address: 10.1.16.166
> www.yahoo.com
Server: klo-emp-dc-1.emp.oc
Address: 10.1.16.166
Non-authoritative answer:
Name: new-fp-shed.wg1.b.yahoo.com
Addresses: 2001:4998:124:1507::f001
2001:4998:124:1507::f000
74.6.143.25
74.6.143.26
Aliases: www.yahoo.com
> www.yahoo.com
Server: klo-emp-dc-1.emp.oc
Address: 10.1.16.166
Non-authoritative answer:
Name: new-fp-shed.wg1.b.yahoo.com
Addresses: 2001:4998:124:1507::f000
2001:4998:124:1507::f001
74.6.143.26
74.6.143.25
Aliases: www.yahoo.com
> 192.60.123.100
Server: klo-emp-dc-1.emp.oc
Address: 10.1.16.166
Name: 192-060-123-100.res.spectrum.com
Address: 192.60.123.100
>

5-4



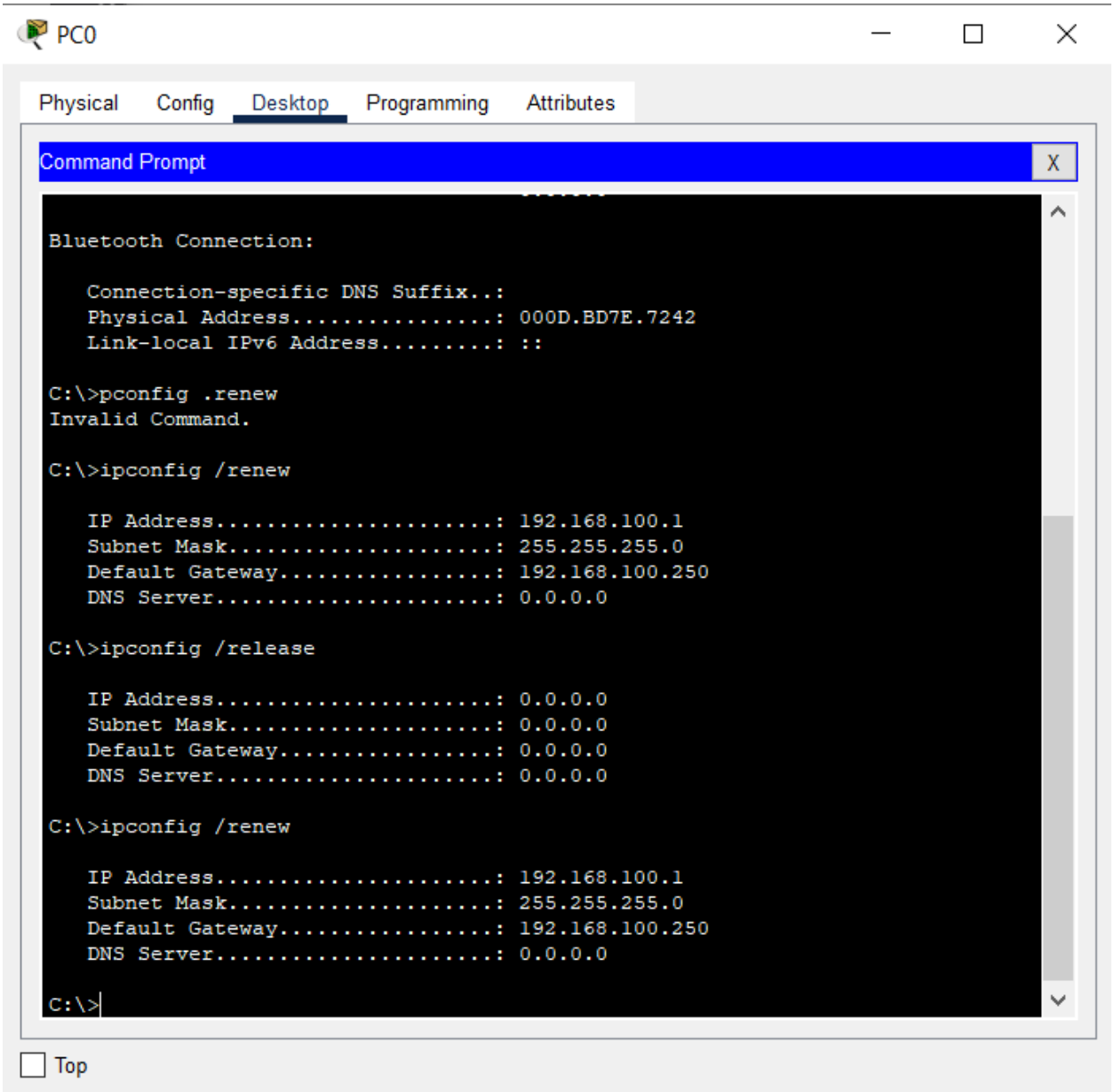
Packet tracer lab 5-1

3:
Port Status: 4th layer
Bandwidth: 4th layer
Duplex: 2nd layer
MAC Address: 2nd layer
DHCP: 5th layer
IP Address: 3rd layer

5:
Gateway: 3rd Layer
DNS Server: 5th layer
6:
DNS
7:
3rd layer
Ping request timed out

8:
Time out again

Packet tracer lab 5-3



Challenge lab 5-1
Http capture filter

TCP protocol

Source port 49682
Dest port 80
Sequence #
(Relative: 0
Raw: 3815045695)
Flags:SYN: Set
Calculated window size: 64240
Calculated window size is the buffer space we have for extra data for receiving packets.
Maximum segment size: 1460 bytes
Calculated window Size: 65535
The maximum payload size an endpoint is willing to receive.
Max segment size: 1460
When data is sent through a TCP connection it keeps track of the conenction and guarantees no packet is lost.

5-2

We used a ipconfig /release to release our address, then a ipconfig /renew to renew a new address

Port 67 || Port 68

Request
ACK
Discover
Release

Port 67 Source
Port 68 Dest

Case Project 5-1

The Conclusion is that you cannot get a ip address assigned to you, more than likely the DHCP is incorrect, but could be many factors. But in the end, the lady cannot receive a IP address.

Case Project 5-2

Assign a DHCP range for a small amount of computers and assign a static IP to any printers, servers or permanent nodes.