Part B Labs 1-3

**Lab 1**

Step 3

B. Is the static route in the routing table?

Step 4

B. Is the static route in the routing table?

Step 7

c. What IP address was assigned to the workstation?

Graphical user interface, application

Description automatically generated

d. What other information was automatically assigned? DNS, Gateway, and Domain name.

e. When was the lease obtained? Packet Tracer does not appear to show that information using ipconfig /all

This is from my laptop connected to the Library Wi-Fi which show applicable information

Graphical user interface, text

Description automatically generated Text

Description automatically generated

f. When will the lease expire? See above. Leases can be configured to be expired in different intervals. In most cases it is 24 hours however can be shortened or extended based upon environment.

Step 8

B. Graphical user interface, text

Description automatically generated

C. Hardware/MAC address lease expiration and the type of binding.

**Lab 2**

It appears Packet Tracer’s routers do not allow for the Ip DNS server command in order to enable the DNS server.

**Lab 3**

Part 1 Step 5

Packet Tracer does not support the HTTP server command and functions

Part 2 Step 3

192.168.1.20= 209.165.200.225

The inside global address is assigned by? Network interface or Internet Service Provider

The Inside local address is assigned by? PC-A’s network interface ip address.

Part 2 Step 3 C

What was the protocol used in this translation? TCP

What are the port numbers used? 1034, 23

Inside global / local: 209.165.200.225/ 192.168.1.20

Outside global / local: 192.31.7.1/ 192.31.7.1

Part 3 Step 6A

What is the translation of the inside local address for PC-B? 192.168.1.21= 209.165.200.242

What port number was used in this ICMP exchange? Port 1

Part 2 Step 6C

What protocol was used in this translation? TCP

What port numbers were used? Inside: 1038-1052

Outside: 80

What well-known port number and service was used? HTTP port 80

Reflection:

1. Why would NAT be used in a network? NAT would be used to help route traffic to inside hosted services.
2. What are the limitations of NAT? NAT provides one in-bound connection to a host.