Name: Krish Thakkar

Class: IS 6640-09

Professor: Dave Norwood

UID: U1495638

Date: September 10, 2023

Topic: Lab A - TCP/IP Utilities

A computer screen shot of a computer

Description automatically generated

Snippet: 2.1.1

A screenshot of a computer

Description automatically generated

Snippet: 2.1.4

In addition, what is the MAC address of Ethernet 0: 00:50:56:90:63:98

**A screen shot of a computer

Description automatically generated**

Snippet: 2.1.5

In addition, explain in your own words what it means that the “IP information is set statically.”

The word static IP means that the IP address is going to stay constant in comparison to dynamic IP address will change at a set time.

A screenshot of a computer

Description automatically generated

Snippet: 3.1.4

In addition, in your own words what is a “well-known port number”:

Ports ranging from 0 to 1023 related to networking are considered well-known ports.

A screenshot of a computer

Description automatically generated

Snippet: 3.1.5

A screenshot of a computer

Description automatically generated

Snippet: 4.1.2

A screen shot of a computer

Description automatically generated

Snippet: 4.1.6

In addition, in your own words why are all the local port numbers such high values?

The port numbers range from 0 to 65535. Port numbers are 16-bit unassigned integers and ever service has its own specific endpoint in networking.

A computer screen with white text

Description automatically generated

Snippet: 5.1.1

A computer screen with white text

Description automatically generated

Snippet: 5.1.3

A screenshot of a computer

Description automatically generated

Snippet: 5.1.7

In addition, in your own words, what is a “hop”?

In simple words hop refers to the movement of data from one network to another node. In other words, it is from one network device to another.

A screen shot of a computer

Description automatically generated

Snippet: 5.1.8

A screenshot of a computer

Description automatically generated

Snippet: 6.1.6

Review Questions:

1. The ARP protocol is used to determine the MAC Address address of a node when the IP address is known. **6.3.1**
2. ARP uses a broadcast to transmit to all nodes on a local network/segment. **6.3.2**