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Topic: Lab C: TCP/IP Protocols – The Core Protocols

A computer screen shot of a computer

Description automatically generated

Snippet: 1.2.4

A screenshot of a computer program

Description automatically generated

Snippet: 1.2.7

2.1.2.1: What is the meaning of each column of the ARP Cache?

The physical address signifies the mac address of the device whereas the Internet addresses explains the IP address and the type provides the type of protocol being used; Dynamic or static

A computer screen shot of a black screen

Description automatically generated

Snippet: 3.1.6

A screenshot of a computer

Description automatically generated

Snippet: 3.2.6

A screenshot of a computer

Description automatically generated

Snippet: 3.1.7

3.3.1: What is the opcode for an ARP request?

Opcode for ARP Request is 1.

3.3.2: What is the opcode for an ARP reply?

Opcode for ARP reply is 2.

3.3.3: What type of packet is an ARP request?

ARP request is also known as Address Resolution Protocol, a type of ethernet packet. ARP works in layer 2 of the OSI Model.

3.3.4: Why would an ARP frame have a destination MAC address of 00:00:00:00:00:00?

The reason ARP Frame has a destination MAC address of 00:00:00:00:00:00 is cause it is a broadcast ARP request.

3.3.5: What type of packet is an ARP reply?

ARP reply is also known as Address Resolution Protocol, a type of ethernet packet. ARP works in layer 2 of the OSI Model.

A screenshot of a computer

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Snippet: 4.1.5

4.1.6.1: What is the IP address of the computer that initiated the HTTP session?

192.168.12.11

4.1.6.2: What control bit must be on to initiate the three-way handshake?

SYN control bit must be on in order to initiate the three-way handshake.

4.1.6.3: What is the destination port in the first TCP SYN?

131.107.0.200

4.1.6.4: What identifies a segment as a FIN segment?

Termination of a TCP connection is considered as a FIN segment.

A screenshot of a computer

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Snippet: 4.2.5