Homework 0: Wireshark with Web Traffic

8) WHAT IS THE FULL PATH OF Document Root DIRECTORY ON YOUR WINDOWS 10 VM?
The path is
C:\xampp\htdocs

9) WHAT IS THE IP ADDRESS OF YOUR HOST COMPUTER (your physical laptop/desktop), and HOW DID YOU FIND THIS INFORMATION?
My host ip is 192.168.0.40 I am on ubuntu so I used ip addr show in the terminal if I was on windows I could have used ipconfig as well

13) IN THE TCP THREE-WAY HANDSHAKE THAT BEGINS THE EXCHANGE OF THIS WEB PAGE, WHICH IP ADDRESS INITIATES COMMUNICATION (sends the first packet)? Hence, we will refer to this as packet 0.
my host with ip 192.168.56.1 (in the virtual box virtual network) will start the exchange with a SYN packet

14) WHAT ARE THE INITIAL TCP SEQUENCE NUMBERS USED BY EACH SIDE OF THE WEB PAGE EXCHANGE?
The sequence number is 0 for both sides of the exchange

15) HOW MANY PACKETS INTO THE CONVERSATION (how many packets after "packet 0") IS THE PACKET WHICH CONTAINS THE TEXT OF THE WEB PAGE index.html?
4 packets into the conversation

16)
a. WHAT IS THE FIRST LINE OF THE HTTP HEADER IN THE PACKET WHICH CONTAINS THE TEXT OF THE WEB PAGE index.html?
HTTP/1.1 200 OK

b. DOES THIS LINE OF THE HEADER INDICATE SUCCESS OR FAILURE?
It indicate Success

17)
a. HOW MANY PACKETS INTO THE CONVERSATION (how many packets after "packet 0") IS THE PACKET WHICH CONTAINS THE GET REQUEST FROM THE Host Computer TO THE Windows 10 VM?
3 packets into the conversation

b. WHAT IS THE FIRST LINE OF THE GET REQUEST HTTP HEADER (starts with the word "GET")?
GET / HTTP/1.1

c. WHAT TEXT IS IN THE "User-Agent" FIELD OF THIS HEADER? (What do you think this User-Agent field indicates?)
User-Agent: Mozilla/5.0 (X11; Linux x86_64) AppleWebKit/537.36 (KHTML, like Gecko) Chrome/88.0.4324.96 Safari/537.36
it indicates what browser I am using.

18) WHICH SIDE (Host Computer or Windows 10 VM) IS THE FIRST TO SIGNAL AN END TO THE CONVERSATION (in other words, sends the TCP Fin flag)?
The web server (windows 10 VM) ends the conversation and sends the FIN package.

19) WHAT ARE THE TCP FLAGS OF THE LAST PACKET SENT IN THE CONVERSATION? WHICH COMPUTER (Host or VM) SENDS THIS PACKET?
The flag of the last packet is ACK. Sent from the server (VM)

20) NOW THAT THE Windows 10 VM IS ON THE "VIRTUAL HOST-ONLY ADAPTER,"OPEN A BROWSER INSIDE THE VM AND ACCESS http://www.csun.edu DOES THIS SUCCEED? WHY OR WHY NOT?
No, we can't reach the internet because in host only adapter the VM is virtually connected only to the host.