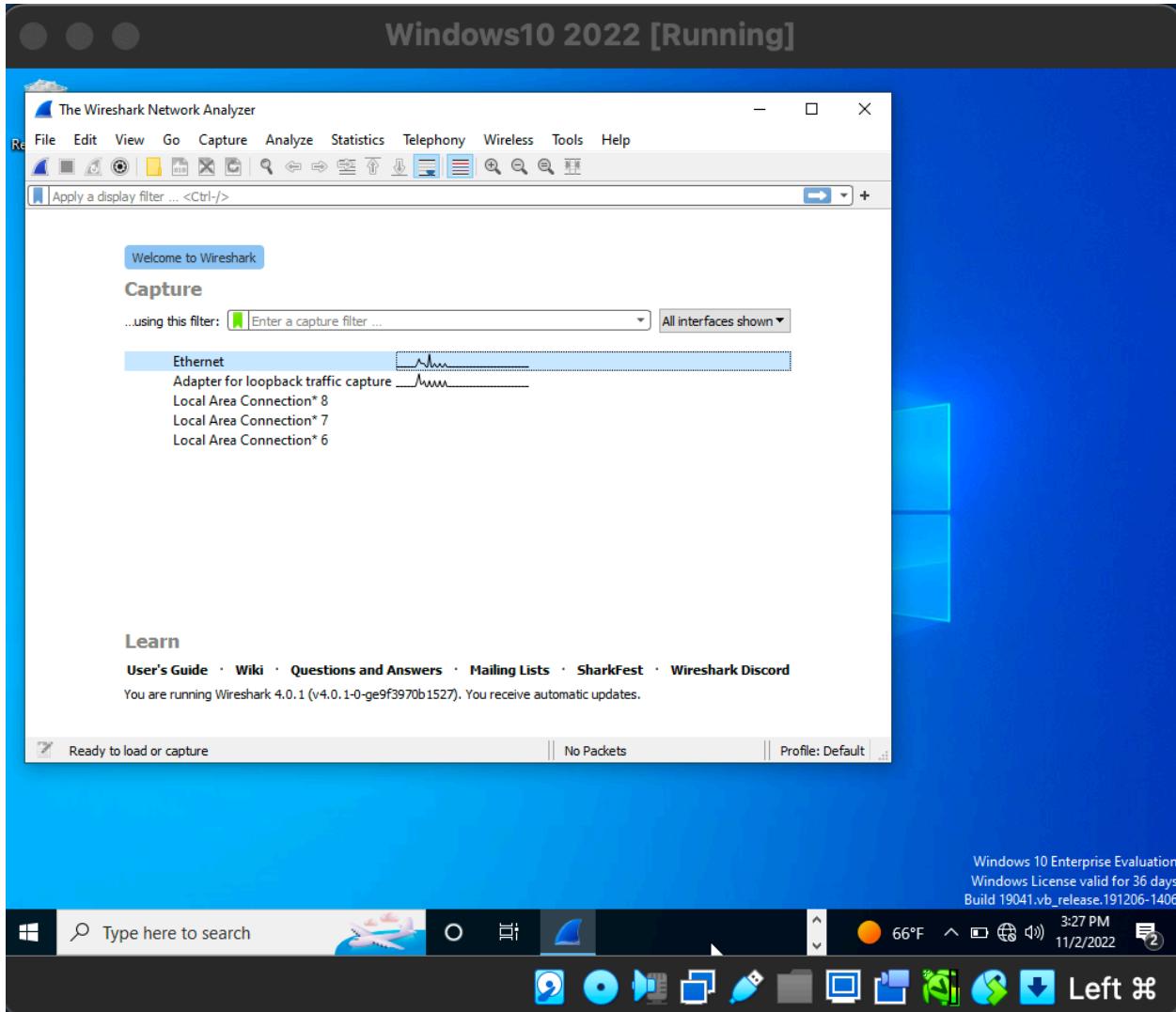
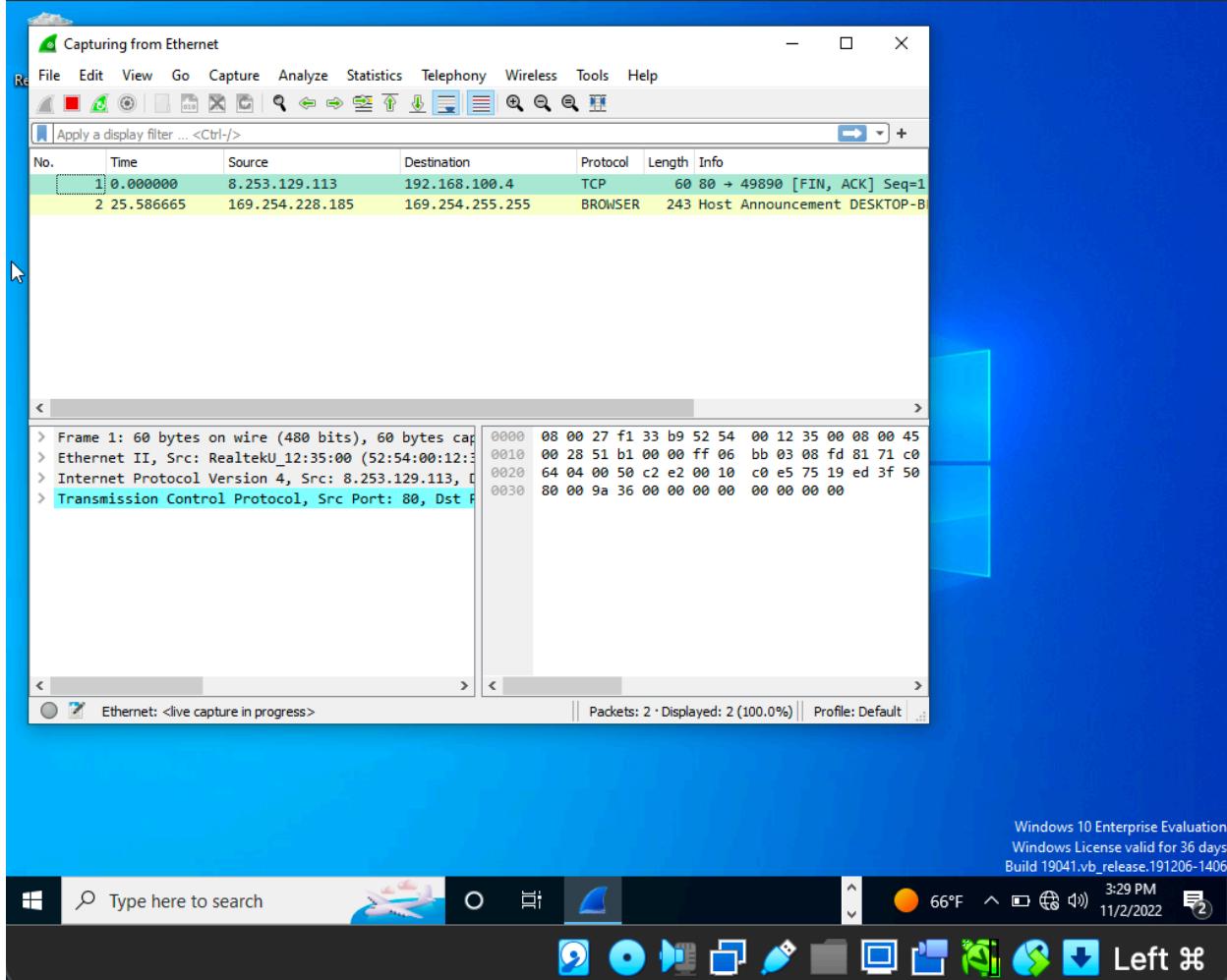


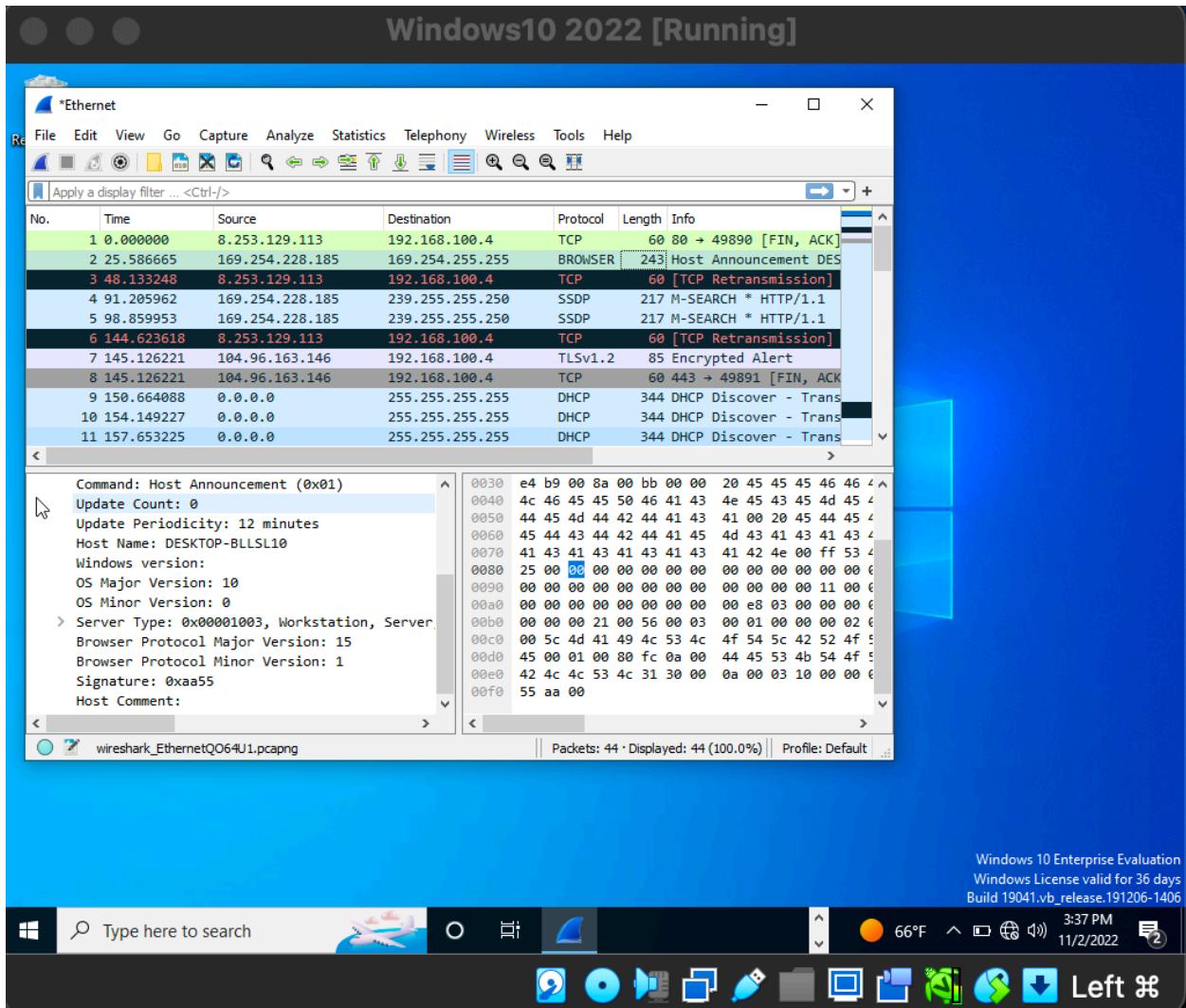
Task 1



Windows10 2022 [Running]



Task 2

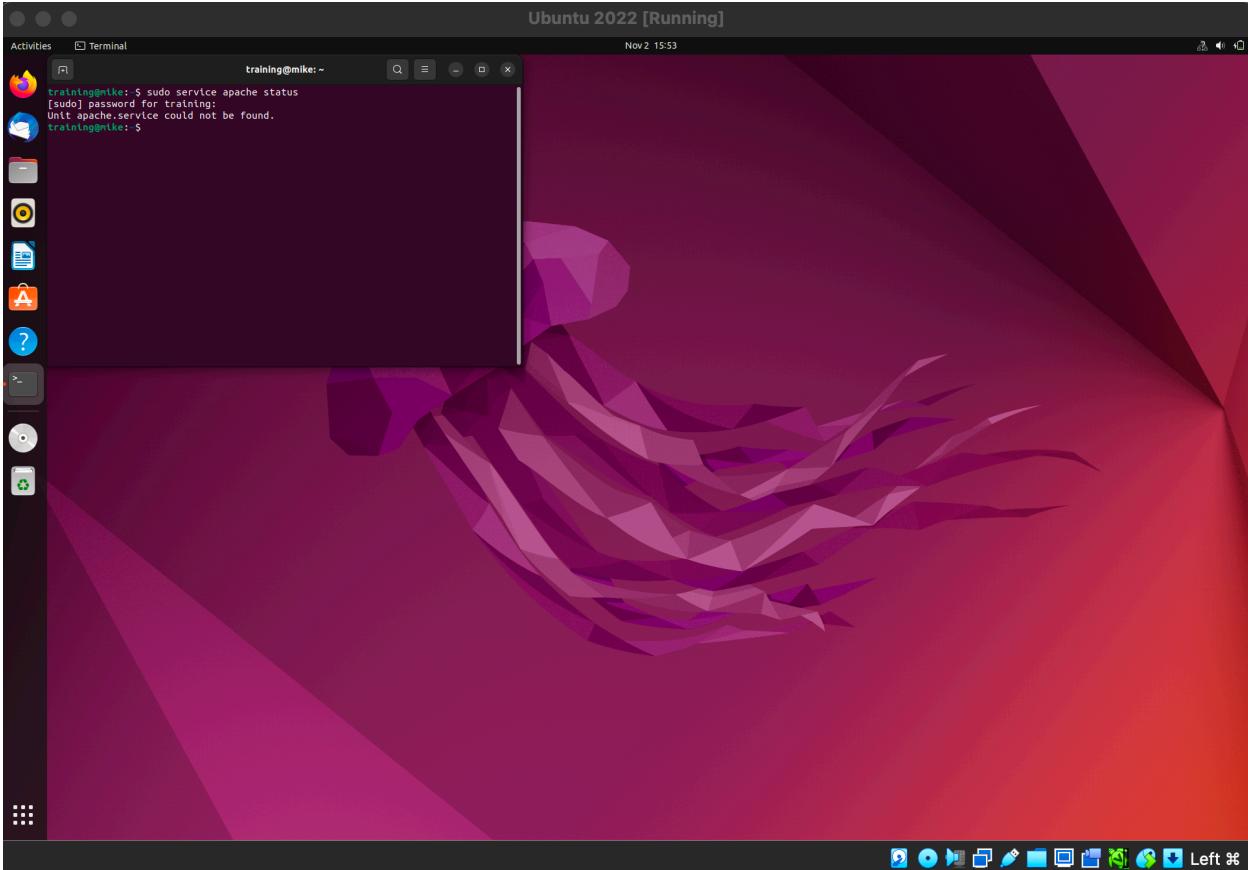


- A) TCP and SSDP protocol is used in these transactions.
- B) Host announcement, workstation and server
- C) Microsoft Windows Browser Protocol, version 10
- D) Browser Protocol, version 15
- E) Server type and OS version

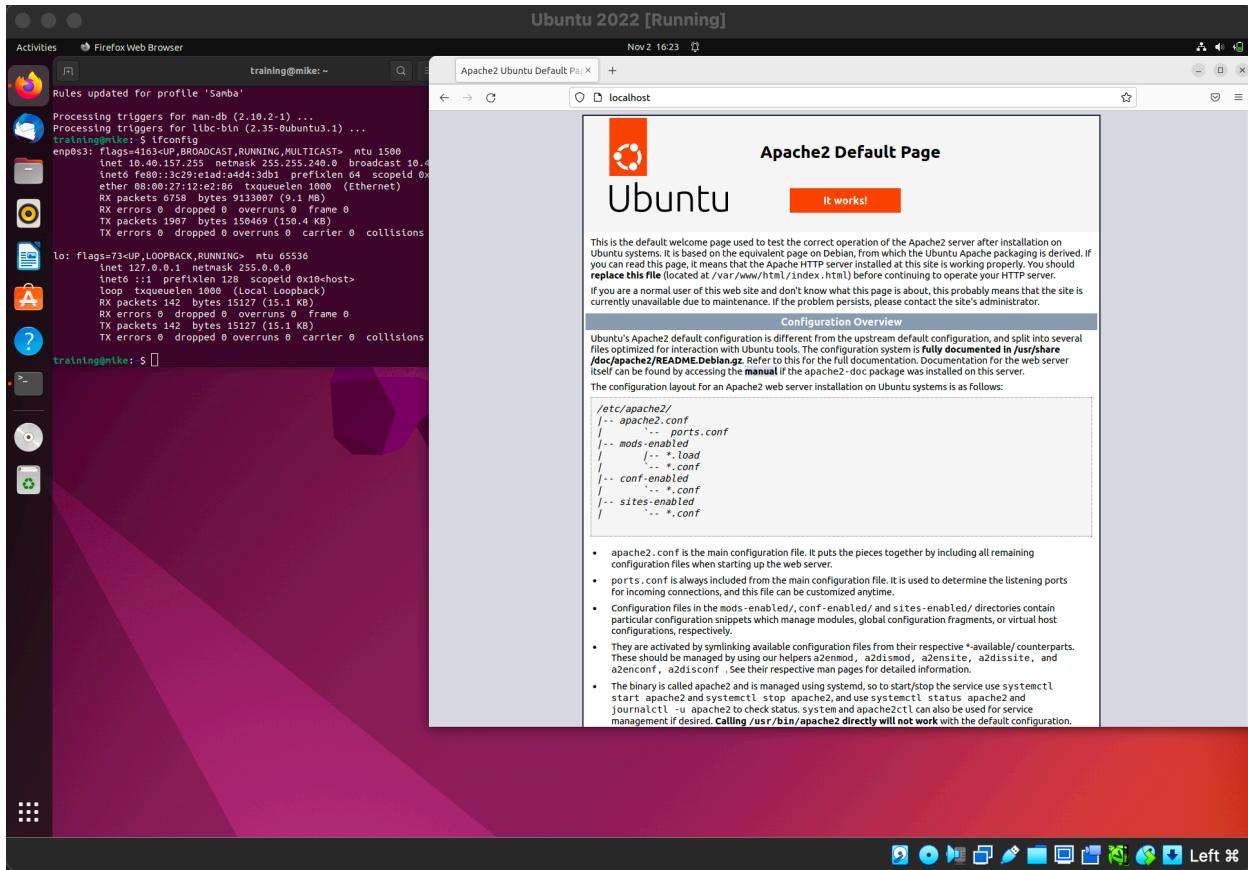
Task 3

Exercise 1

1.



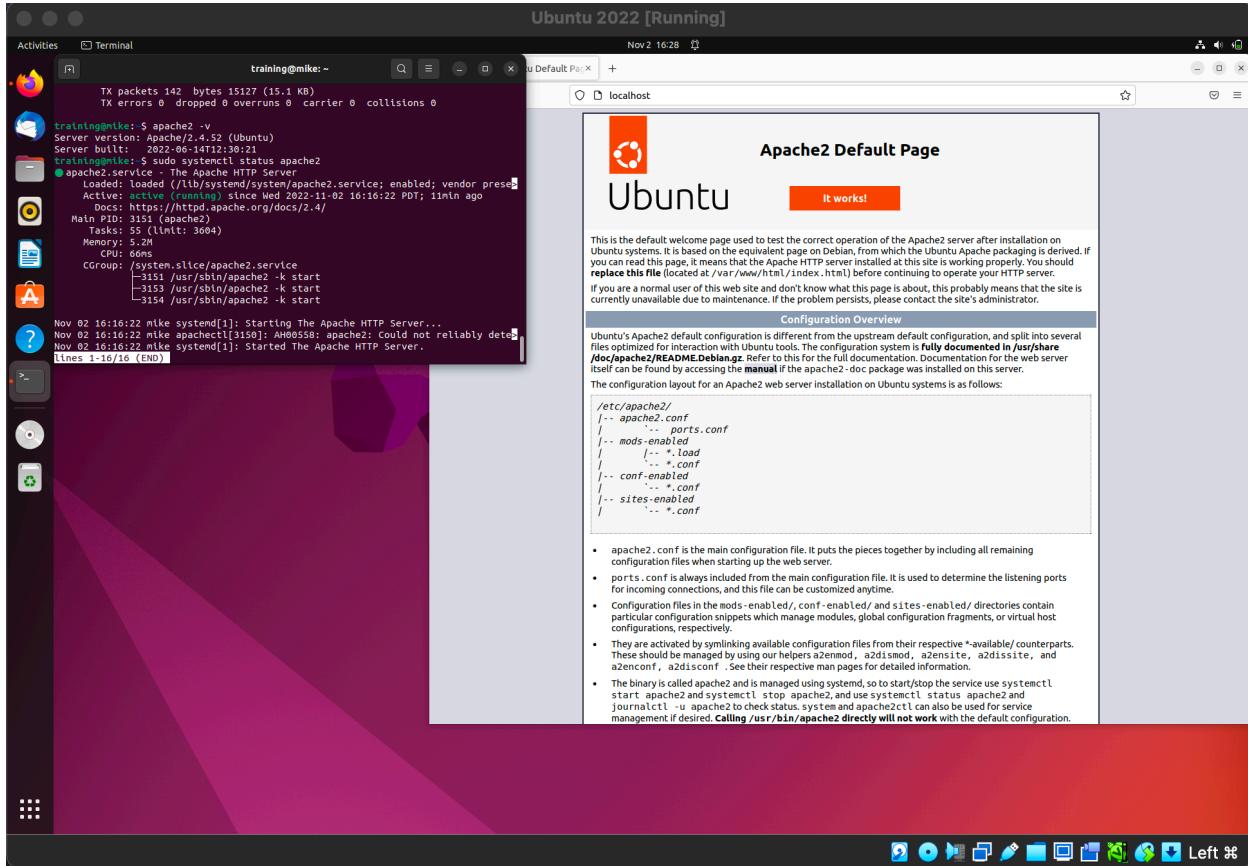
2.



Exercise 2

- * Apache reference manual - /usr/local/apache2/etc/apache2
- * Apache configuration file - /etc/apache2/apache2.conf
- * Document root - /var/www/html/document.root
- * Error documents history - /var/log/apache2/error.log
- * Log files - /var/log/apache2/access.log
- * Apache daemon - /usr/local/apache2/conf/httpd.conf

Exercise 3



Ubuntu 2022 [Running]
Nov 2 16:33

```
root@mike:/home/training# netstat -an | grep httpd
unix 3      [ ]        STREAM     CONNECTED  59488  /run/dbus/system_bus_socket
unix 3      [ ]        STREAM     CONNECTED  25321  /run/user/1000/bus
unix 2      [ ]        DGRAM      CONNECTED  24378   -
unix 3      [ ]        STREAM     CONNECTED  24347   /run/user/1000/pulse/native
unix 2      [ ]        DGRAM      CONNECTED  23656   -
unix 3      [ ]        STREAM     CONNECTED  18500   -
unix 3      [ ]        STREAM     CONNECTED  24157   /run/systemd/journal/stdout
unix 3      [ ]        STREAM     CONNECTED  24669   /run/user/1000/at-spi/bus
unix 3      [ ]        STREAM     CONNECTED  65619   -
unix 3      [ ]        STREAM     CONNECTED  60083   -
unix 3      [ ]        STREAM     CONNECTED  25406   /run/user/1000/gvfsd/socket-cPfeoj0T
unix 3      [ ]        STREAM     CONNECTED  24617   -
unix 2      [ ]        STREAM     CONNECTED  19590   -
unix 3      [ ]        STREAM     CONNECTED  25296   -
unix 3      [ ]        STREAM     CONNECTED  24577   /run/user/1000/bus
unix 3      [ ]        STREAM     CONNECTED  24542   -
unix 3      [ ]        STREAM     CONNECTED  18210   /run/dbus/system_bus_socket
unix 3      [ ]        SEQPACKET  CONNECTED  59807   -
unix 3      [ ]        STREAM     CONNECTED  59782   /run/dbus/system_bus_socket
unix 3      [ ]        STREAM     CONNECTED  24780   -
unix 3      [ ]        STREAM     CONNECTED  63944   -
unix 2      [ ]        STREAM     CONNECTED  63917   -
unix 3      [ ]        STREAM     CONNECTED  24844   @/tmp/.ICE-unix/1619
unix 3      [ ]        STREAM     CONNECTED  24596   /run/user/1000/wayland-0
unix 3      [ ]        STREAM     CONNECTED  23110   /run/user/1000/pipewire-0
unix 3      [ ]        STREAM     CONNECTED  18472   -
unix 3      [ ]        STREAM     CONNECTED  23376   /run/systemd/journal/stdout
unix 3      [ ]        STREAM     CONNECTED  22663   -
unix 3      [ ]        STREAM     CONNECTED  22606   /run/systemd/journal/stdout
unix 3      [ ]        DGRAM      CONNECTED  22531   -
unix 3      [ ]        DGRAM      CONNECTED  22530   -
unix 3      [ ]        STREAM     CONNECTED  22235   -
unix 3      [ ]        STREAM     CONNECTED  21446   -
unix 3      [ ]        SEQPACKET  CONNECTED  64392   -
unix 3      [ ]        STREAM     CONNECTED  23871   /run/systemd/journal/stdout
root@mike:/home/training# netstat -an | grep httpd
root@mike:/home/training#
```

Could not display anything after command even in root. Next picture fixes problem.

Ubuntu 2022 [Running]
Nov 2 18:06

```
root@mike:/home/training# systemctl status apache2
Active: active (running) since Wed 2022-11-02 18:03:55 PDT; 1min 16s ago
  Docs: https://httpd.apache.org/docs/2.4/
 Process: 669 ExecStart=/usr/sbin/apachectl start (code=exited, status=0/SUCCESS)
 Main PID: 727 (apache2)
   Tasks: 55 (limit: 3604)
     Memory: 7.6M
       CPU: 86ms
      CGroup: /system.slice/apache2.service
              ├─727 /usr/sbin/apache2 -k start
              ├─731 /usr/sbin/apache2 -k start
              └─732 /usr/sbin/apache2 -k start

Nov 02 18:03:54 mike systemd[1]: Starting The Apache HTTP Server...
Nov 02 18:03:55 mike apachectl[703]: AH00558: apache2: Could not reliably determine the server's fully qualified domain name, using 127.0.0.1 for Port 80
Nov 02 18:03:55 mike systemd[1]: Started The Apache HTTP Server.
lines 1-17/17 (END)

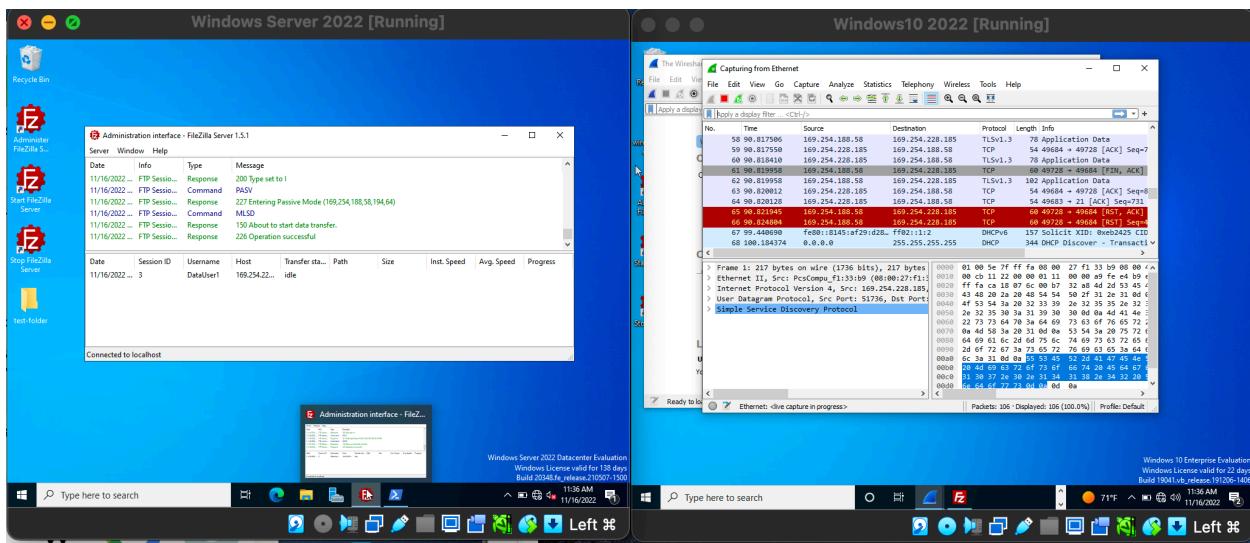
training@mike: ~$ netstat -anp | grep apache
(Not all processes could be identified, non-owned process info
will not be shown, you would have to be root to see it all.)
training@mike: ~$ sudo -s
root@mike:/home/training# netstat -anp | grep apache
tcp6      0      0 ::1:80          ::::*                  LISTEN
727/apache2
root@mike:/home/training#
```

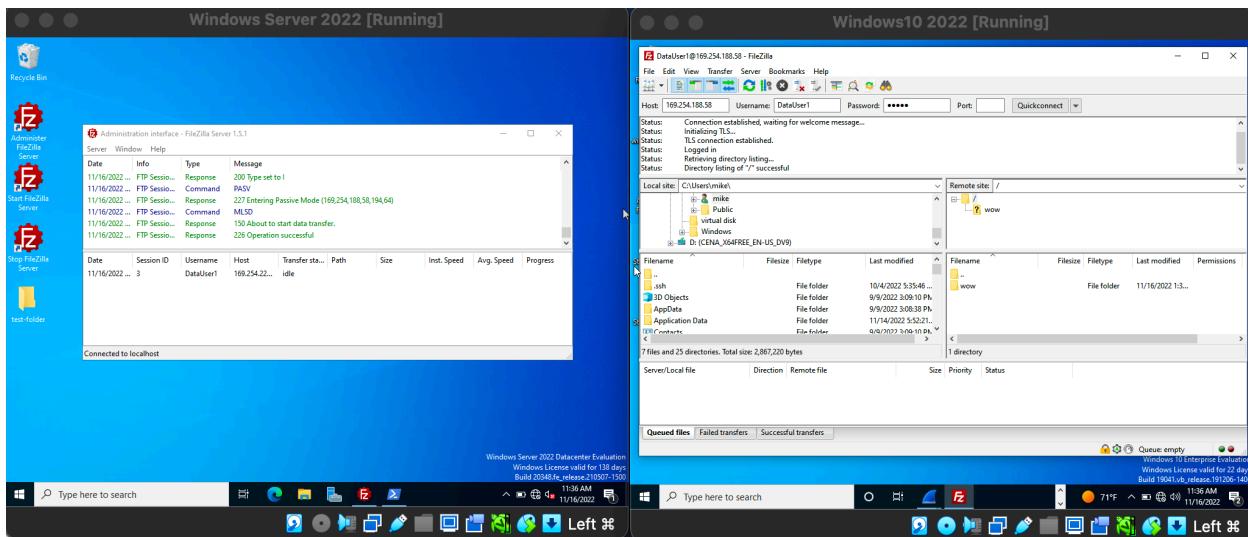
Tried with a different command and got this.

Questions

1. You can use apachectl -S to find out what the users and groups are used to run apache.
2. Type your ip in the browser and a page should load saying “It Works”. You could also do sudo systemctl status apache2 to see if its running.
3. Access log and Error log files.
4. Virtual hosting is a method for responding to requests that are directed to multiple IP addresses or host names that correspond to the same host machine.
5. Get a secure version of apache, secure underlying operating systems, run only features that you need, configure your server correctly and patch vulnerabilities.

Task 4





1. The default ports used is port 21.
2. In passive mode the FTP server waits for the FTP client to send it a port and IP address to connect to. In active mode, the server assigns a port and the IP address will be the same as the FTP client making the request.
3. There is a icon that allows you to manage connections to clients. At any point you can add or remove clients.
4. You could limit access to the ftp and make login credentials harder to solve.
5. Yes you can maintain a log of requests and responses.

Task 5

1. The difference between tftp and ftp is that tftp is a simplified alternative to ftp that provides no authentication and is most often used to transfer configurations to and from network devices.

