CYSE 301: Cybersecurity Technique and Operations

Assignment: Lab 1– Explore CCIA virtual environment and basic Linux commands.

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Task A. Get ready with VMs (30 points)

1. Power on the following VMs:

Tip: you can take one screenshot indicating all VMs are running or one screenshot for each running VM.

- pfSense Firewall
- Kali External Workstation
- Windows Server 2008
- Ubuntu 64-bit

beach be	Virtual Machines						Actions
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	Ubuntu 1804-64-bit Windows 7 Windows Server 2008 R2 Windows XP Professional	Off Off Running Off	0%	2048 MB	00:05:16		Virtual Switch Man Virtual SAN Mang Virtual SAN Mang Inspect Dick Stop Service Stop Service Resource Server
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	Attacker Kali - External Workstation						Settings
	Created: Configural Generatio Notes:	Created: 7/24/2021 84/02 PM Configuration Version: 90 Generation: 1 Notes: Kal External: 192.168.217.3 Logn: root				ed: No eat: OK (No Application Data)	Turn Off Shut Down Save Pause Live Reset Live Reset
	Summary Memory Networkin	password toor Summary Metrook Networking					Checkpoint

I started the VM, typed Hyper-V into the search bar, opened it, right clicked, and started each VM up one at a time.

2. Find the IP address of the following VMs by using command:

Tip: you can take one screenshot for each running VM with the corresponding IP address.

- Ubuntu 64-bit
- Kali Linux



Typed ifconfig into Kali and Ubuntu

3. Verify the connection between Kali Linux VM and Ubuntu VM using the ping command.



Tip: you can take <u>one screenshot when both VMs are talking.</u>

Task B: Practice with Linux Commands (Complete the following tasks in the Ubuntu VM)

Tip: You can take one screenshot to cover the answer for multiple tasks.

- 1. Display your current directory in a terminal.
- 2. Use the echo command to print your name to the console.
- 3. Display your **first and last names in two separate lines** using a **single echo command** (tip: how to enable the interpretation of escape characters?)
- 4. Execute the command to return to your **home** directory.
- 5. Create a new file named "forXXXX.txt" in your home directory (replace "XXXX" with your own

MIDAS). Then, use the long listing format to display the contents in your home directory. What is the size of the file you just created?

6. Create a new directory named "XXXX" in your home directory (replace "XXXX" with your own

MIDAS). Then, use the **long listing format** to display the contents in your home directory. What is the size of the file you just created?

- Copy /etc/passwd file to your home directory and rename the file to "passwd_XXXX" (replace "XXXX" with your own MIDAS). Then, complete the following two subtasks:
 - Use the proper command to display the first **six** lines in this file.
 - Search keyword "www" in this file.



This is for steps 1-4, and they are self-explanatory on screen.

Below are Steps 5-7

(Sorry in advance sir, MS Word is very finicky with images so past here looks very odd.)



Step 5; the size of the new text file is 0 bytes.



Step 6; Size of the new directory is 4096 bytes



Step 7: Grep searched the file for uses of www, cp copied passwd into my home directory's passwd file, and head -6 displays the first 6 lines in the file.