OLD DOMINION UNIVERSITY CYSE 301 Cybersecurity Technique and Operations

Assignment 1

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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



By using the CCIA Virtual Environment I was able to log in and using the Hyper-V manager to launch the needed VMs.

2. Find the IP address of the following VMs:

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

- Ubuntu 64-bit
- Windows Server 2008
- Kali Linux





After opening the terminals in the three requested VMs I launched the command 'ifconfig' for Kali and Ubuntu to gain their IP addresses. For Windows 2008 I used the command 'ipconfig' to gain the IP address. 192.168.10.10 192.168.217.3

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

Tip: you can take one screenshot when both VMs are talking.



Using the information in the last question I ping the respected IP addresses to show the connection between the two VMs.

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

- **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?



I displayed questions 1-6 in this screenshot. For question 5 the txt file that I had created was sized as 0 bits and then for question 6 the directory that I created was 4096 bits.

7. 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. .



The above screenshot shows my using the command 'cp' to copy the needed file to my home directory. Then I use the command 'head -n 6' to display the first 6 lines of text within the file. Then I used the 'grep' command to search for 'www' within the file.