CYSE 301: Cybersecurity Technique and Operations

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

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

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

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.

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 "for**XXXX**.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?

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.