Guided Exercise - System Information

Assignment Objectives:

On completing this assignment, you should be able to:

- Use the command line to discover system and hardware information

Part 1

Instructions:

Follow the instructions for each task. When indicated, answer the questions or provide the necessary screenshots.

Task

Task 1

Sign in to vShpere and open your virtual machine. (If you are not sure how to do this, review the handout found in Blackboard in the Virtual Lab folder.) Login to the Will Adams account using the password netlab123.

Task 2

Open the terminal app.

Task 3

The kernel is the core of an operating system and with drivers allow the system to interact with the hardware. To view the kernel version for your system use the command:

uname -r

What kernel version is your system running?

Submit your answer for this task **on the answer sheet** as **Answer 1**..

Task 4

The free command displays RAM information for your system. Use the following command:

free -h

The -h displays the RAM size as human readable.

How much total RAM, usage RAM and available RAM does your system have?

Submit your answer for this task **on the answer sheet** as **Answer 2**.

Task 5

The df command displays the disk usage for your file system and partitions. Use the command below with the -h option to view how much space you have on your hard drive.

df -h

What is the total size of your root partition /? what percentage of the / partition is being used? How much space is available?

Submit your answer for this task **on the answer sheet** as **Answer 3**.

Task 6

The du command displays the size of an individual file. Use the command below with the -h option to view the size of the /var/log/messages file.

du -h /var/log/journal

Use the du command to view the size of the /var/log/dmesg file. What is the size of this file?

Submit your answer for this task **on the answer sheet** as **Answer 4**.

Task 7

The lscpu command displays information about the cpu in your system. Use the following command:

lscpu

What model of CPU is your system running?

Submit your answer for this task **on the answer sheet** as **Answer 5**.

Task 8

The lsblk command will display each block device attached to your system including hard drives or usb drives. Hard drive

partitions are identified as the following:

sda1 - s=sata d=disk a=first hard drive, 1=first partition on this drive
sda2 - second partition
sdb1 - the first partition on the second (b) hard drive.

Use the following command:

lsblk

How many hard drive partitions does your system have? What is the size of each partition?

Submit your answer for this task **on the answer sheet** as **Answer 6**.

Task 9

Explain what each of the following commands do:

du, df, lscpu, free, lsblk

Submit your answer for this task **on the answer sheet** as **Answer 7**.

Task 10

What does the -h option do for the du, df and free commands?

Submit your answer for this task **on the answer sheet** as **Answer 8**.