

Linux Activity - Practice Questions

For this exercise, you may use your own laptop to complete the questions below. For Windows users, feel free to run “bash” in your powershell. For Mac users, you may continue with your terminal.

Note: You may not have all the directories listed below on your local machine, and that is fine. You can continue with the activity by creating the directory e.g. /opt/app or /tmp. You may need admin permission for this i.e.

1. What is the command that can output the total memory used by LINUX?
2. What is the command to use when you want to change to the directory “/opt/app”?
3. What is the command that you can find running processes on your VM with the name “cron”?
4. What is the command that you can run to assume or change your current user to “root” user?
5. What is the command that can show all the files in the directory “/tmp”?
6. What is the command that can show all the files in the directory “/tmp” including hidden files?
7. What is the command that can show all the files in the directory “/tmp” sorted by date and time?
8. What is the command that you can run to create a folder called “/tmp/ntu/module1/5”?
9. What is the command that you can run to create a file in folder /tmp/ntu/module1/5 called “assignment.txt”?
10. What is the command that you can run to change the owner of the file “/tmp/ntu/module1/5/assignment.txt” to “root”?
11. What is the command that allows you to view the contents of file “/tmp/ntu/module1/5/assignment.txt”?
12. What is the command that allows you to edit and update file “/tmp/ntu/module1/5/assignment.txt” with the string “Hello, I am learning linux commands!” ?
13. What is the command that allows you to copy the file “/tmp/ntu/module1/5/assignment.txt” to a new folder “/tmp/ntu/module1/6” ? Assume you have already created the folder /tmp/ntu/module1/6
14. What is the command that allows you to move the file “/tmp/ntu/module1/5/assignment.txt” to “/tmp/ntu/module1/6”? This means that the folder /tmp/ntu/module1/5 should be empty.
15. What is the command that allows you to remove or delete the file “/tmp/ntu/module1/6/assignment.txt”?
16. What is the command that shows whether the website www.netflix.com is reachable?

Additional Questions

1. What is the command that allows you to change the permissions of a folder `"/tmp/app"` with permissions "Owner - Read, Write, Execute, Group - Read, and Public - Read"? Refer to <https://chmod-calculator.com/>
2. What is the command that allows you to change the permissions of a folder `"/tmp/app"` with permissions "Owner - Read, Write, Execute, Group - Read, Write, and Public - Read"? Refer to <https://chmod-calculator.com/>
3. You have a log file from your application located at `"/var/log/output.log"`. Your team lead requires you to search the logs for the occurrences of the word "ERROR". What is the command that you can run to get the expected result?
4. Your team lead now would like you to use the same file `"/var/log/output.log"`, but this time, you will need to print the number of times the word "ERROR" is found in the file. What is the command that you can run to get the expected result?
5. Your team is no longer using the directory `"/var/log/output/"`, which still contains a list of files. What command would you run to remove all the files as well as the directory?
6. Create a file called `"coaching.txt"` in the directory `"/tmp/ntu/module1/6/"` with the 2 line contents:
 - a. `"This file is for coaching lessons"`
 - b. `"This file is in the /tmp/ntu/module1/6 directory"`
7. You found out that you have placed the file from the previous question in the wrong folder. You are required to move the file to the folder `"/tmp/ntu/module1/coaching"` instead. What command would you run?
8. On top of that, you found out that you have incorrectly named the file. Instead of `"coaching.txt"`, you are required to rename it as `"coaching-1.txt"`. What is the command you would run?
9. You are asked to find the top 5 running Linux processes on your VM by CPU utilization. What command would you run?
10. You have multiple log files in different sub-directories under `/tmp` that contain the string `".log"`. You are requested to find all the files in the different sub-directories. What command would you run?
11. What is meant by the "root" account and what is it used for? Who has access to this account?
12. You were informed that there is something called Ksh and Csh, on top of Bash. What are the differences between these 3?
13. What is a cron in Linux and what is it used for?
14. You were informed that there are many applications and software built on UNIX. What is the difference between UNIX and Linux?
15. What are the functions of the Linux Kernel?