

**LAB**

**LINUX SYSTEM ADMINISTRATION**

**Copyright © (2022-2023) All Rights Reserved**

**Dr. Matthew Kisow**

VERSION 2

07-JUN-2023

**LAB:** LAB09-02

**OBJECTIVE**: The objective of this lab is to learn how to set file permissions.

**INSTRUCTIONS**: These labs will test your ability to actively research how to perform a required action on a Linux operating system. All questions asked (below) should be included in a lab report. This lab report should be written in Microsoft Word and include a numbered list corresponding to the task (below). This list must include a clear screenshot of the command and its output. Please follow the instructions for submitting this assignment on Blackboard.

* *You should be logged in as* **labuser3** *with the password ‘P@$$w0rd’*
* *You will switch to the* **labuser2** *account using the password ‘P@$$w0rd’*
* You must be in the /labs/CH09/LAB09-02 folder to complete this lab.

1. Change into the 'Physicists' folder.

**EINSTEIN**

1. Using the ***groups*** command, list the groups for labuser1, labuser2, and labuser3.
2. Using the ***vim*** text editor, open the ***einstein.txt*** text file and place the following line of text in that file: "*E=mc2*" and exit from vim.
3. Using the ***su*** command, switch to the ***labuser2*** account and navigate to the ***Physicists*** folder.
4. Using the ***vim*** text editor, open the ***einstein.txt*** text file and add the following text under the previous line: "*If you can't explain it to a six-year-old, you don't understand it yourself,*" and exit from vim.
   1. Were you able to add the text?
   2. Why?
5. Exit from the ***labuser2*** account.
6. Change the permissions on the ***einstein.txt*** file granting the ***labusers2*** group rw permissions; no other permissions should be set.
7. Using the ***su*** command, switch to the ***labuser2*** account and navigate to the ***Physicists*** folder.
8. Using the ***vim*** text editor, open the ***einstein.txt*** text file and add the following line of text under the previous line: "*Logic will get you from A to Z; imagination will get you everywhere*," and exit from vim.
   1. Were you able to add the text?
   2. If not, then why?
9. Exit from the ***labuser2*** account.

**FILES OWNED BY LABUSER2**

1. Find the physicists whose files are owned by ***labuser2***.
   1. How many are there?
   2. Who are they?

**NEWTON**

1. Using the ***vim*** text editor, open the ***newton.txt*** text file and add the following line of text under the existing line: "*This must be gravity!*" and exit from vim.
2. Were you able to add the text?
3. If so, then why?
4. Using the ***su*** command, switch to the ***labuser2*** account and navigate to the ***Physicists*** folder.
5. Using the ***vim*** text editor, open the ***newton.txt*** and add the following text to that file: "*Nature is pleased with simplicity. And nature is no dummy*." and exit from vim.
6. Were you able to add the text?
7. If so, then why?
8. Exit from the ***labuser2*** account.

**REMAINING FILES**

1. Using the ***vim*** text editor, open the remaining two files owned by ***labuser2***. In the file, you can edit and add the text under the existing line: "*Any man whose errors take ten years to correct is quite a man.*" and exit from vim.
2. Which file were you able to edit?
3. Using the ***su*** command, switch to the ***labuser2*** account and navigate to the ***Physicists*** folder.
4. Add only the permissions needed for ***labuser3*** to edit and save the file that could not be edited in the previous step.
5. Exit from the ***labuser2*** account.
6. Using the ***vim*** text editor, open the remaining unedited files owned by ***labuser2***. Add the text under the existing line: "*People who boast about their I.Q. are losers*." and exit from vim.
7. Were you able to update the file this time?
8. Why?

**LISTING GROUPS**

1. Type the following command: "*id -nG labuser3*"
2. What groups is ***labuser3*** a member of?
3. Type the following command: "*id -nG labuser2*"
4. What groups is labuser2 a member of?

**EXECUTABLE FILES**

1. Type the following command: "*cat physicists-list*"
2. What does it look like this file does?
3. Type the following command: “*./physicists-list*”
4. What happened?
5. Add the execute permission to the user and group of the ***physicists-list*** file. Then Type the following command: “*./physicists-list*” again.
6. What happened?