Lab Requirement 2 - Linux Basics II

Requirement

A- In order to demonstrate Linux commands follow the following steps:

1. Under your home directory, Create a new directory called Lab2.
2. Copy the files words & numbers to lab2 folder.
3. Create a new file that contains the content of the words & numbers merged side by side and save it to a file called “MergeContent”
4. Display the first three lines in the MergeContent
5. Sort the MergeContent and save your result in SortedMergedContent in the same folder
6. Try to replace all small letters with capital ones in SortedMergedContent
7. Find the line numbers starting with “w” and ending with a number in MergeContent .
8. Replace every occurrence of “I” in MergeContent with “O” and save it to NewMergeContent in the same folder
9. Display both files MergeContent & NewMergeContent side by side on terminal

B- In order to demonstrate permissions in full, you need to create a few additional users, tux1 and tux2, who both will be members of the penguins group. For this, you need to execute a few commands which normally need not be executed by a regular user.

1. Open a new terminal (lets called T0) , log in as root
2. Execute the following series of commands for creating users:

```
# groupadd penguins
# sudo useradd --create-home  tux1
# sudo usermod -a -G pengiuns tux1
# sudo useradd --create-home  tux2
# sudo usermod -a -G pengiuns tux2
# passwd tux1
```

Newpassword:**penguin1**
Retype new password: **penguin1**
passwd tux2
Newpassword:**penguin2**
Retype new password: **penguin2**

3. Open a new terminal (lets called *T1*), log in as **tux1** with password **penguin1**, and on a new terminal (lets called *T2*), log in as **tux2** with password **penguin2.**
4. Switch to *T1*, where you are logged in as tux1, and look at the permissions on your home directory.
5. Switch to *T2*, where you are logged in as tux2. Try to change to the home directory of tux1, or read the contents of the home directory of tux1. Does this work?
6. **Red Hat only:** Switch to T1. Change the permissions on the home directory of tux1 so that other users are allowed to read and access it. Then try to access the directory again as tux2. Does this work now?
7. As tux2, try to create and delete files in tux1s home directory. Does this work?
8. Switch once again to T1. Create a "bin" directory and copy the file /bin/ls in there, renaming it to my_ls in the process.
9. Set the permissions on my_ls to **rw-r** , then try to execute it, both as tux1 and tux2. Does this work? Why not?
10. Now set the permissions to **rwxr-xr-x**, then try to execute it once more, both as tux1 and tux2. Does this work now?