

## Red Hat Lab – Chapter 4

Use Red Hat Lab Environment to complete the lab. Issue the following commands immediately before step 1:

```
history -c  
history -w
```

These commands should be repeated for each user@machine prompt. See boxes below.

Paste a screenshot in the box below of the command output from the command below. Include the command itself in the screenshot:

```
lab grade help-review
```

Issue the command `history` after the last step for student@workstation. Paste a screenshot of the history for student@workstation in the box below. Include the command itself and the full history of commands. Paste in the box below:

```
student@workstation
```

## Red Hat Lab – Chapter 5

Use Red Hat Lab Environment to complete the lab for this chapter. Issue the following commands immediately

before step 1: `history -c`  
`history -w`

These commands should be repeated for each user@machine prompt. See boxes below.

Paste a screenshot in the box below of the command output from the command below. Include the command itself in the screenshot:

**lab grade edit-review**

Issue the command `history` after the last step for student@workstation. Copy the command itself and the full history of commands. Paste in the boxes below:

**student@workstation**

## Lab Manual

Use the VirtualBox RHELv9 virtual machine for this lab. Do not use the Red Hat Lab Environment. Issue the following commands in the Terminal window before starting the lab on the next page:

```
history -c  
history -w
```

Repeat these commands for root@RHELv8 if necessary.

Paste the results of the history command in the box at the end of the lab.

# Lab 07: Getting Help

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1. Access the man page for the ls command.
2. What letter needs to be typed to get help while viewing a man page?
3. Use some of the help suggestions to move around the man page. When finished, exit back to the terminal session.
4. Display the section 5 man page for passwd. Then exit back to the command prompt.
5. Search the man pages for the keyword passwd.
6. Search only for the man page named passwd.
7. Use a different command to find man pages about passwd.
8. Use info pages to learn about the ls command.
9. While viewing the info page for the ls command, go down to the menu section and the line "Sorting the output". How do you then link to that page?
10. What do you type to return to your original place?

# Lab 08: Standard Text Streams and Redirection

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1. From your home directory, redirect the output of the `ls` command to `ls_output.txt`
2. Append the output of the `date` command to the file you just created.
3. Find all files in `/etc` with the filename `hostname` while redirecting all error messages to `error.txt`
4. Do the same thing but redirect both standard output and standard error to `find_output.txt` and `find_error.txt`
5. Do the same thing but redirect both standard output and standard error to the same file called `find_output.txt`
6. Translate all lower-case characters to upper-case in `/etc/hosts`.
7. Translate all lower-case characters to upper-case in `/etc/hosts` and save the output in `~/myhosts`
8. View the output of `ls -l /etc` one page at a time.
9. Extract field 7 from `/etc/passwd`, sort the output, and then eliminate duplicate lines with a command on one line.
10. Count the number of occurrences of `man` in the command history and redirect to `count.txt`

# Lab 09: The vi Editor

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The vi editor is available on every Linux distribution in the world. Most Linux systems have an alias for vi that executes the vim command, an improved version of the original vi editor.

The vi editor works in three modes: command, insert and ex. The **command** mode is used to type commands to navigate the document, the **insert** mode is used to enter new text into the document, and the **ex** mode is used for file operations such as saving and quitting.

## Use the vi Editor:

1. Execute the **vi edit.txt** command to create a new file called edit.txt. The vi editor will open.
2. Exit the vi editor by typing **:q!**
3. Execute the **ls -alR /usr > data.txt** command to generate a new file.
4. Execute the **vi data.txt** command to open the file for editing.
5. Press the **i** or the **INSERT** key to enter insert mode.
6. Type **Inserting text on line 1** and press Enter.
7. Press the **ESC** key to return to the command mode. and press the **DOWN ARROW** key six times to move down six lines. Press **i** to insert text at the beginning of the line. Type **Inserting on line 7** and press Enter.
8. Press the **ESC** key to return to the command mode. Press the up arrow key and then type **dd** to delete the current line that you just created.
9. Move to the end of the document by typing **G**.
10. To add a new line at the end of the document, type **o** and then type the text **The end**. Press the **ESC** key to return to the command mode.
11. Go to line #1 by typing **1G**. Search for **local** by typing **/local**. Type the letter **n** to move to the second occurrence of **local**.
12. Delete the current word by typing **dw**.
13. Type **1G** to return to the first line and then **5dd** to delete five lines.
14. Copy three lines by typing **3yy**. Then move to the end of the document by typing **G**. Paste the three lines by typing **p**.
15. Undo the paste command by typing **u**.
16. Type **:q** and then press the **ENTER** key to attempt to quit the document.
17. The previous command **:q** failed because you have not saved the changes that you made in the file. To quit without saving type **:q!** and press the **ENTER** key to quit the document without saving.
18. Open the data.txt file by executing the **vi data.txt** command.
19. Type **1G** to return to the first line of the file. Replace the first line of the document by typing **cc** and then type the text **Output:**
20. Press the **ESC** key to return to the command mode. Then type **:w** to save the changes.
21. Type **:q** to quit the vi editor.
22. Verify that your updates were written to the file by entering **head data.txt**.

