

## Linux Introduction

Rev 1.1

### Overview:

The purpose of this lesson is to provide you with an introduction to the Linux terminal and command line. You will use an online tutorial to learn basic Linux commands that are crucial tools when working with code and applications. This lesson is only an introduction. Students are encouraged to complete additional Linux training.

### Prerequisites:

Prior to beginning the instruction provided in this lesson you must have completed the following:

1. Raspberry Pi Startup

### Performance Outcomes:

1. Access the Linux terminal emulator from the RPi desktop.
2. Execute basic Linux commands.
3. Access and save the Linux command history.

### Resources:

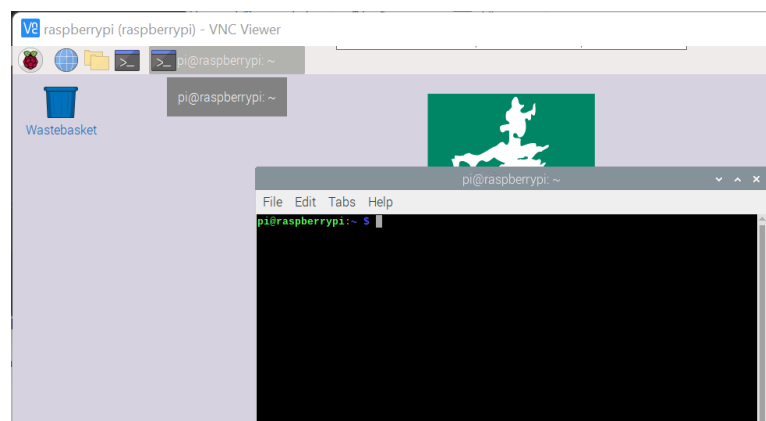
1. [An Introduction to the Linux Terminal | DigitalOcean](#)
2. [Linux Navigation and File Management | DigitalOcean](#)
3. [An Introduction to Linux Permissions | DigitalOcean](#)

### Materials:

1. RPi System

### Directions:

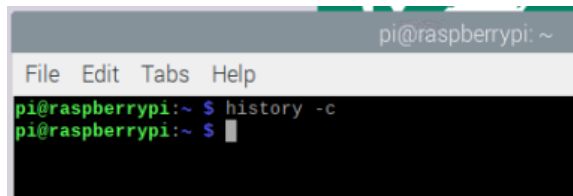
1. Access your RPi system using the VNC remote connection created in the prior Raspberry Pi Startup lesson.
2. Use the Terminal icon on the taskbar to open a terminal window.



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4. In this lesson, you'll follow along with the instructor as they complete a series of Linux commands presented in the online tutorials listed in the Resources section.
5. You are required to follow along on your RPi system as the tutorials are completed. A history of your command line actions is submitted at the end of the activity.
6. Enter the command below to clear the current history.

**history -c**

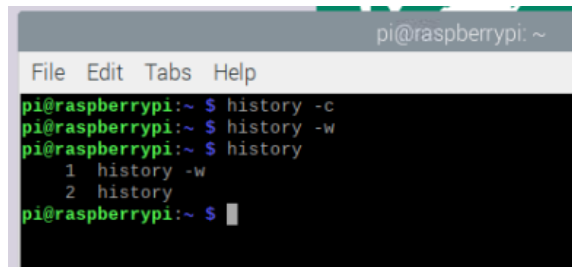


```
pi@raspberrypi: ~  
File Edit Tabs Help  
pi@raspberrypi:~ $ history -c  
pi@raspberrypi:~ $
```

7. Now write the history to the history file using the following.

**history -w**

8. Type just the `history` command to view the history.

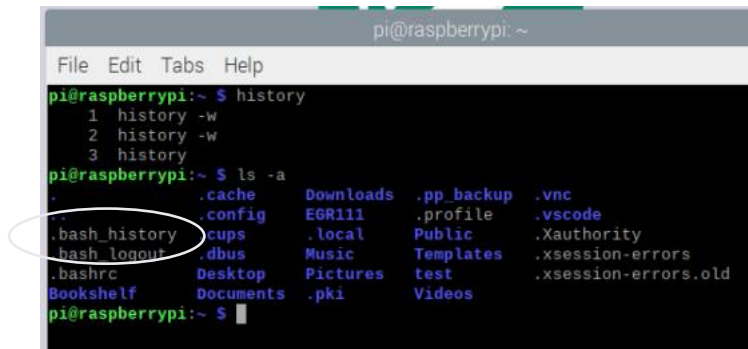


```
pi@raspberrypi: ~  
File Edit Tabs Help  
pi@raspberrypi:~ $ history -c  
pi@raspberrypi:~ $ history -w  
pi@raspberrypi:~ $ history  
 1 history -w  
 2 history  
pi@raspberrypi:~ $
```

9. Open the [An Introduction to the Linux Terminal | DigitalOcean](#) tutorial link on your workstation. Follow along with the instructor as they complete tutorial steps.
10. View the updated command line history by entering `history` as the command.
11. The instructor will continue by completing the next tutorial - [Linux Navigation and File Management | DigitalOcean](#)
12. The instructor will review the [An Introduction to Linux Permissions | DigitalOcean](#) tutorial content and complete actions as time permits.
13. Enter the `history` command again to see the updated command history from this session.

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14. Enter the command `history -w` to write the revised history to the file named `.bash_history`
15. List the history file by entering `ls -a` at the home directory.



```
pi@raspberrypi: ~  
File Edit Tabs Help  
pi@raspberrypi:~ $ history  
1 history -w  
2 history -w  
3 history  
pi@raspberrypi:~ $ ls -a  
.  
..  
.cache  
.config  
.bash_history  
.bash_logout  
.bashrc  
Bookshelf  
Downloads  
EGR111  
.local  
Music  
Pictures  
Documents  
.pp_backup  
.profile  
Public  
Templates  
test  
.vnc  
.vscode  
.Xauthority  
.xsession-errors  
.xsession-errors.old
```

16. Display the contents of the history file by entering `cat .bash_history`
17. Navigate to your EGR111 workspace directory. Verify that you have a weekXX directory for this week's work (week02?). Copy the `.bash_history` file to this week's directory using the `cp` command.

### Assessments:

1. You will submit your EGR111 workspace to the instructor on or around week 03. Be sure your `.bash_history` file is included showing the completed Linux tutorial commands.