

**Fundamentals of UNIX**  
**Lab 5.3.1 – Basic Command Line Syntax**  
**(Estimated time: 30 min.)**

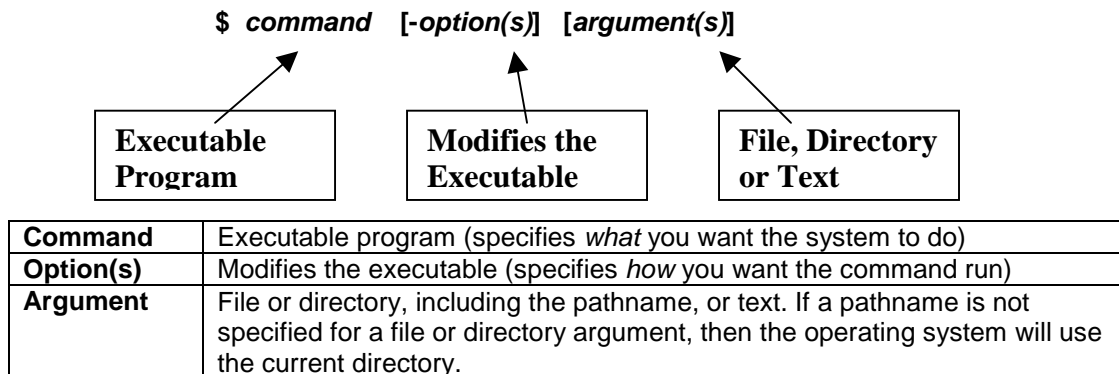
**Objectives:**

- Become familiar with UNIX command line syntax
- Use various UNIX commands with options and arguments
- Use the man pages to learn about UNIX commands

**Background:**

In this lab, you will work with various UNIX commands to develop an understanding of UNIX commands and syntax. Commands are typed in at the shell prompt and they are instructions that tell the system to perform an action. **Syntax** refers to the structure of the command and specifies allowable options and arguments. The general format for UNIX commands is:

**\$ command [-option(s)] [argument(s)]**. Items in square brackets are optional, meaning they are not always required.



A **space** must be used as a **delimiter** between each part of the command entered. UNIX commands are always **lower case**. Options are usually a single letter preceded by a **hyphen (-)**, also called a **dash** or **minus sign**. Multiple options can be combined using only one hyphen. The option might be upper or lower case depending on the command. Many commands do not require all three parts. Multiple commands can be entered on one line by separating them with a semicolon (;).

**Tools / Preparation:**

- a) Before starting this lab, review Chapter 5, Section 3 – Navigating the File System
- b) You will need the following:
  1. A login user ID (e.g. user2) and password assigned by your instructor.
  2. A computer running the UNIX operating system with CDE
  3. Networked computers in classroom

**Notes:**

---

---

---

---

---

---

---

---

---

---

**Fundamentals of UNIX**  
**Lab 5.3.1 – Basic Command Line Syntax**  
**Worksheet**

**Perform the following steps to complete this lab.**

**Step 1. Log in to CDE**

Login with the user name and password assigned to you by your instructor in the CDE entry box.

**Step 2. Access the Command Line**

To access a command prompt, login directly in character mode or open a terminal window under CDE. If you bypass CDE or if you telnet or rlogin to a remote computer, you will have direct access to a command prompt. In this lab we will assume you are running a terminal window in CDE, but the commands will be the same regardless. Telnet and rlogin will be covered later in the course.

Right click on the **workspace** backdrop and click on tools. Select **Terminal** from the menu to open a terminal window. If you are using the Bourne or Korn shells, you will have a dollar sign (\$) prompt. If you are using the C shell you will have a percent sign (%) prompt.

**Step 3. Use the cal Command**

- a. Enter the following command: **\$ cal**

What was the result? \_\_\_\_\_

**Step 4. Use the cal Command with Arguments**

- a. Enter the following command: **\$ cal 2001**

What was the result? \_\_\_\_\_

(Note: If you are using a terminal window, you can scroll up if months are off the screen)

- b. Enter the following command: **\$ cal 9 1752**

What is wrong with this calendar? \_\_\_\_\_

c. To find out why this is, use the **man pages** to learn more about the **cal** command. Scroll through the man pages and read the **NOTES** section to find an explanation of what happened to the calendar in September of 1752.

Enter the following command: **\$ man cal**

What is the reason the calendar for September of 1752 is missing 11 days?

That is the month that 11 days were skipped to make up for the lack of leap in the prior calendars.

- d. Do some web research to find out more about this change. Use the **www.google.com** search engine to find articles containing the words "**calendar 1752**"

**Step 5. Use the date command**

Enter the following command: **\$ date**

- a. What was the result? \_\_\_\_\_

- b. What time zone are you in? \_\_\_\_\_

**Fundamentals of UNIX**  
**Lab 5.3.1 – Basic Command Line Syntax**  
**Worksheet**

**Step 6. Use the date Command With an Option**

Enter the following command: **\$ date -u**

a. What was the result? \_\_\_\_\_

b. When using the date command, the time is displayed as a **24-hour clock**. Compare the results of steps 5 and step 6. How many hours are you from **Greenwich Mean Time (GMT)**? \_\_\_\_\_

c. Use the **man pages** for the **date** command to find out what the **-u** option does with the date command. What did the man pages tell you?

---

---

---

---

**Step 7. Use the banner Command With an Argument**

Enter the following command: **\$ banner "hi there"**

a. What was the result?  
\_\_\_\_\_

**Step 8. Use the ls command**

The **ls (list files)** command requires at least two parts: the command and an argument. The argument is the file or directory you want to list. If you do not specify an argument, it will default to your home directory. The ls command will be covered in greater detail later.

a. Enter the ls command by itself: **\$ ls**  
What was the result? \_\_\_\_\_

b. Enter the ls command with an option: **\$ ls -l** (long listing)  
What was the result? \_\_\_\_\_

b. Enter the ls command with an option and an argument: **\$ ls -l dir2** (long listing of the dir2 directory)  
What was the result? \_\_\_\_\_

**Step 9. Close all open windows and/or applications.**