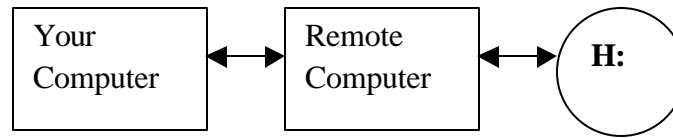



### CSC-100 Computer Lab Login Procedure



1. Turn monitor on. Most monitors have a power button on the lower front panel. Usually, there is also a small light that glows when power is turned on. Old monitors may have a rocker switch along the side or on the back.
2. Turn on the computer.
  - a. The HP VL Vectra computers may turn on when you press the spacebar on the keyboard.
  - b. All the computers will turn on when you push the power button located on the system unit. On most computers, the power button will be on the front panel. On old computers, it is often on the back, or on the side near the back.
3. Enter the word “student” as both the User Name and the Password.
4. (Info) The computer will initially be under the local control of Windows 95. It has several icons (pictures) on the screen (called a “desktop”).
5. Double-click the icon labeled “CSC100”. This configures your computer as a remote terminal to another computer controlled by the NT 4.0 operating system.
6. (Info) The remote computer supplies the desktop now displayed on the monitor. This desktop has a black background and a WINDOWS NT Login/Logon Screen.
7. Enter your personal User Name and Password to the Login Screen for Windows NT. Click OK when you are done. The User ID and Password are case-sensitive. Allow one minute for the system to setup your new desktop.
8. (Info) This new desktop (black background) has an icon labeled “UNIX”.
9. Double-click the UNIX icon. The purpose of this login is to connect you to your H: drive, which is where you will store work that you do.
10. (Info) A logon screen will appear for a UNIX emulator running under NT 4.0.
11. Enter your personal user identification and press the ENTER key. UNIX will respond with several lines, followed by a prompt for you to enter your personal password.
12. Enter your password and press the ENTER key.
13. (Info) There are three small boxes  in the upper right corner of the UNIX dialog box. The left-most small box has a horizontal line at the bottom. This is the “Minimize” button. Click the “Minimize” button. This causes the dialog box to be minimized. It is still active, but it no longer takes up space on the desktop.

SOME UNIX COMMANDS  
(Reference)

A few UNIX commands will be helpful to you. These are listed below. Before trying them, notice the difference between the lower case letter el “**l**” and the number one “**1**”. We will be using the lower case letter in the UNIX commands. Letters written in **script** are placeholders for names you provide. The symbol ^ refers to the **Ctrl** key.

ls	<u>L</u> ist files in the current working directory
ls -l	List files in <u>l</u> ong format. This displays the mode, number of links, owner, group, size in bytes, and the time of last modification.
ls d	List files in directory <b>d</b>
cat f	Print the contents of file <b>f</b> .
cat f1 f2 > f3	<u>C</u> oncatenate copies of <b>f1</b> and <b>f2</b> and call the result <b>f3</b> .
pwd	Print Working Directory to the screen.
cp f1 f2	<u>C</u> opy file <b>f1</b> into <b>f2</b> .
mv f1 f2	<u>M</u> ove file <b>f1</b> into <b>f2</b> . This renames <b>f1</b> as <b>f2</b> .
rm f	<u>R</u> emove file <b>f</b> . Delete file <b>f</b> .
mv f d	Move file <b>f</b> to directory <b>d</b> .
mv d1 d2	Move directory <b>d1</b> to <b>d2</b> . This renames <b>d1</b> as <b>d2</b> .
cd d	<u>C</u> hange <u>D</u> irectory to directory <b>d</b>
mkdir d	<u>M</u> ake <u>D</u> irectory <b>d</b> . Create a new directory named <b>d</b> .
rmdir d	<u>R</u> emove <u>D</u> irectory <b>d</b> . Delete directory <b>d</b> .
^Z (Ctrl+Z)	Logoff or logout of Unix terminal emulation
kill n	Terminate process <b>n</b> from background
^S (Ctrl+S)	Stop output.
^Q (Ctrl+Q)	Resume output.
pr f	<u>P</u> rint contents of file <b>f</b> with simple page formatting to the screen.

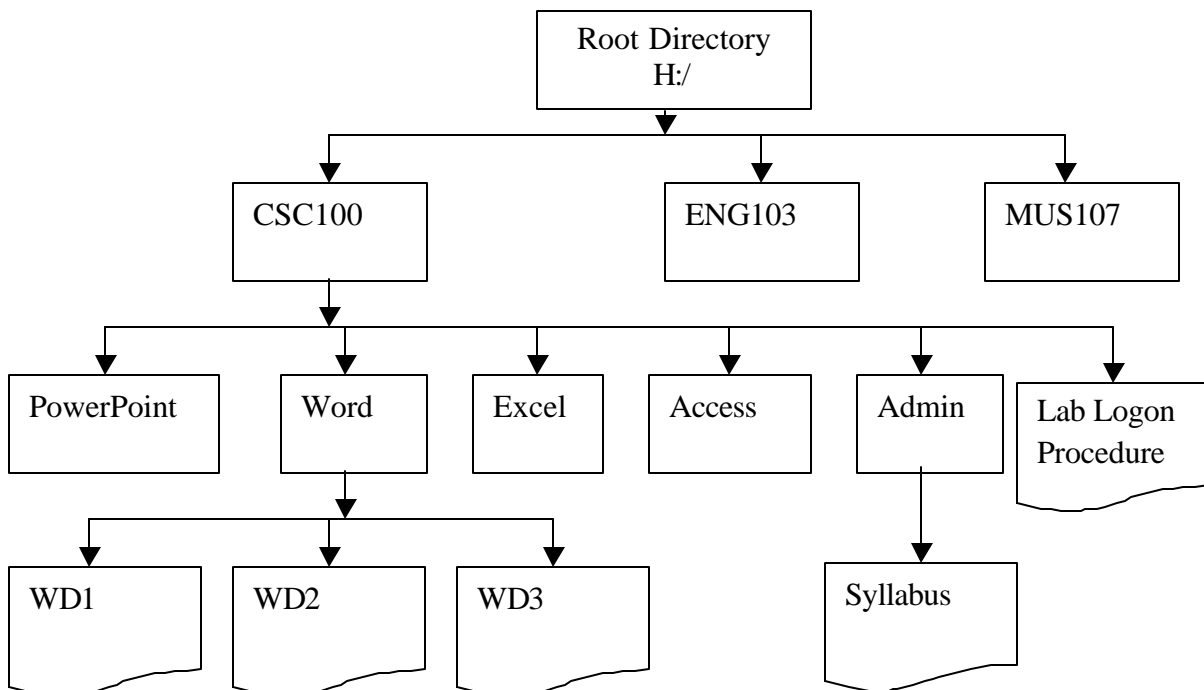
## Directory Tree Structure (Background)

When you succeed in the login procedure, you now have access to resources on the remote computer. One of those resources is a space on a hard disk that is assigned to you. It is called the H: drive. The letter H is called a “logical drive” name. It is possible to partition a hard disk into several logical drives.

A “directory” is a named collection of files and other directories. Consider a directory like a file folder. You can place several files in that folder. You can also place other folders in that folder. Similarly, a directory can contain other directories, as well as files.

We call the main directory the “root directory”. Your root directory is the default directory you have access to after you complete your login.

You can define the directory structure in your own directory to make it much easier to locate and manage the files you have stored there. As you add more directories, you will find that it looks like an inverted tree. For this reason, we call it a “directory tree”. Here is an example.



**Figure 1. Directory Tree**

## Creating the Directory Tree Structure (Procedure)

We will create part of the structure using Windows commands, and we will create the remaining structure with UNIX commands. The purpose is to gain experience with both methods.

**Notation:** A vertical bar “|” is used to indicate a sequence of commands or menu selections. Select “File | New | Folder” means

- Click on the “File” menu in the menu bar.
- Click on the “New” entry on the File menu.
- Click on the “Folder” entry on the “New” menu.

### Creating Directories Using Windows Commands

1. Double-click on the “My Computer” icon on your desktop. This opens the “My Computer” window.
2. Double-click on the “H:” drive icon. This opens a window that displays the contents of the H: drive.
3. Select “File | New | Folder”. A new folder is created, and the insert cursor is positioned for you to type a name for the folder. Type **CSC100**.

### Creating Subdirectories Using Windows Commands

1. Double-click on the CSC100 folder to select this as the folder into which you will establish folders.
2. Select “File | New | Folder”. A new folder is created, and the insert cursor is positioned for you to type a name for the folder. Type **PowerPoint**.
3. Select “File | New | Folder”. A new folder is created, and the insert cursor is positioned for you to type a name for the folder. Type **Word**.
4. Select “File | New | Folder”. A new folder is created, and the insert cursor is positioned for you to type a name for the folder. Type **Access**.

### Using UNIX Commands

1. (Info) After typing UNIX commands, press the **Enter** key.
2. Select the UNIX window by single-clicking on the UNIX button in the Windows NT taskbar, which is the same bar containing the START button. The UNIX window will expand on the Windows NT desktop.
3. Click inside the UNIX window after the last entry. This positions the insert cursor to the bottom of the command line in the UNIX window.
4. Determine the current working directory under UNIX. Do this by typing in the command **pwd**. UNIX will respond by displaying the current working directory on the next line in the UNIX window. It should display H:/, which is the root node in the tree shown in Figure 1.
5. Change directory to CSC100 using the command **cd CSC100**.
6. Enter **pwd** to verify that your current working directory is in CSC100.

7. Enter **lc** or **ls -C** to list in column format the contents of the current working directory, sorted alphabetically down the column. You should see listed the directories **PowerPoint**, **Word**, and **Access**, which you created earlier.

#### Creating Subdirectories Using UNIX Commands

1. Enter **mkdir Excel** to create subdirectory **Excel** within directory **CSC100**.
2. Enter **mkdir Basket** to create subdirectory **Basket** within directory **CSC100**.
3. Enter **mkdir Admin** to create subdirectory **Admin** within directory **CSC100**.
4. Enter **ls -t** to list the contents of the current working directory **CSC100** with the entries sorted by time of last modification, displaying the latest first. When your directory gets large, this is a handy way to find out which file you edited most recently. You should see directories listed in the following order: **Admin**, **Basket**, **Excel**, **Access**, **Word**, and **PowerPoint**.
5. Enter **rmdir Basket** to remove directory **Basket** from directory **CSC100**.
6. Enter **ls -x** to list the contents of the current working directory **CSC100** in column format, with contents sorted by row order.

#### Changing the Current Working Directory Using UNIX Commands

1. Enter **cd Excel** to change the current working directory to **Excel**.
2. Enter **pwd** to print working directory. It should tell you **Excel**.
3. Enter **cd ..** to return to the parent directory of Excel, which is **CSC100**. Note that there is a blank between **cd** and the two dots.
4. Enter **pwd** to print the working directory. It should tell you **CSC100**.
5. Enter **cd Word** to change the current working directory to **Word**.
6. Enter **pwd** to print the working directory. It should tell you **Word**.
7. Enter **cd** to change directory to the home directory. Note that there is no argument field following **cd**.
8. Enter **pwd** to print the working directory. It should respond with your home directory.

## Saving Files and Connecting to the Internet (Information)


When you save a file, it will be saved to the H: drive. You do not have access to floppy disk drives in the computer lab. You can email files to yourself if you want to work on them at home. You can access email from the computer lab to retrieve your email with your attached file.

You can connect to the Internet by double-clicking on the “MC Online” icon or you can open OPERA (a new browser) from the Start | Programs menu. The browser will open. You can type in the URI of your email server into the Address Bar of the browser to gain access to your email account. For example, if you use Hotmail, you type in **http://www.hotmail.com**. If you use Yahoo, type in **http://www.yahoo.com**.

Create an email to yourself. Attach the file you want to work on elsewhere. Click “Send”.

When you get home, sign on to your email server. Open the email you sent to yourself. Download the attachment to your computer. Open the attachment with the application you used for generating the file.

### CSC100 Computer Lab Logout Procedure (Procedure)

1. Click on the UNIX dialog box on the task bar at the bottom of the display. This causes the dialog box to open and display on the screen.
2. Type the word “exit”, followed by the Enter key. This deallocates the H: drive.
3. Press and hold down the “Ctrl” key, and press Z. This terminates the UNIX session. Do NOT exit UNIX by merely clicking the “close” button on the UNIX window.
4. On the Windows NT desktop, press the START button  in the lower left corner or top right corner. Select “Logoff”. This logs you off the remote computer, and returns the local computer to Windows 95 control.
5. (Info) The black background for Windows NT disappears and you now see the blue background for Windows 95.
6. To complete the Logout procedure, press the START button in the lower left corner, and select “Shut down”. The computer should then save system files and turn itself off.
7. Turn your monitor off by pressing the same power button you used to turn it on.