UNIX Commands

This page lists some of the more commonly used UNIX commands.

About UNIX

- Commands are typed at a prompt. Most often, the prompt is a percent sign (%) or dollar sign (\$) but sometimes it is the name of the machine followed by the percent or dollar sign.
- Commands are case sensitive and are usually lower case. This means that Is and LS are completely different commands.
- Spaces are very important. There is always a space between the command and the file or directory it acts upon.
- To execute a UNIX command, press Enter at the end of the command line. If the command is accepted, the prompt and cursor will simply appear on the next line awaiting your next command. If the command is rejected, an error message such as "Command not found" appears. Check your spelling, spaces, etc and try to reenter the command. To negate a command before you have pressed Enter, press CTRL + C.
- To determine your default shell, type echo \$SHELL.
- To change your default shell, run /usr/local/bin/chsh and follow the prompt. Do NOT use flags on the command. This is a custom script and not the standard chsh you might find on Linux machines. After running the command, allow 24 hours for the default shell to take effect.
- Dot files begin with a dot (.) and are used primarily to control system functions. Unless you are an advanced UNIX user, you should not add or delete anything from a dot file.

Common UNIX Commands

Command	Action
cat <file></file>	Print contents of file in the command window
cd <directory></directory>	Change directories
cp <file> <file2></file2></file>	Copy the contents of file into file2
history	List history of all commands issued at system prompt
Is	List the files and subdirectories in a directory
ls -F	List the difference between files and directoriesdirectories have a slash (/)
ls -l	List files with status/detail information
ls -lt	List file information in long format, sorted by time with newest files or newly changed files appearing first
ls -a	List all the files in a directory including dot files
fs Iq	Lists AFS quota, space used, percentage used
fs q	Lists percentage of quota used
mkdir <directory></directory>	Make a directory
mv <file> <file2></file2></file>	Move file to file 2
pwd	Print the pathname of the current directory

rm <file></file>	Remove or delete files
rmdir <directory></directory>	Remove directory
Ctrl + C	To negate a command that you have entered.

Command Examples

Navigating the Fi	ile System (cd command)		
Function	Command	Example	Notes
To move to your home directory	Type cd and press Enter .		No matter where you are in the file system, you can use the cd (change directory) command to get you back to your home directory immediately.
To move to a subdirectory of your own	Type cd <path> and press Enter.</path>	cd public To change from your home directory to your public directory.	When you are changing directories down from your current working directory, it is not necessary to type the full pathname.
To move to another person's home directory	Type cd <path> and press Enter.</path>	cd /afs/andrew.cmu.edu/usr11/juser	In this example, the <path> is the full path of the other person's directory.</path>
Tilde (~)			
Function	Command	Example	Notes
To abbreviate the pathname.	Type cd ~ <andrew id=""> and press Enter.</andrew>	cd ~juser To change into juser's directory without typing in the full path name.	The tilde is helpful when you don't know someone's complete pathname, or when you just want to save typing time. The tilde can be used with any UNIX command; however, you should never use the tilde in command files such as.login or in your preferences file. In these cases, the tilde may not be recognized and can prevent Andrew and UNIX from working properly for you.
Where am I? (pw	/d)		
Function	Command	Example	Notes

To "ask" UNIX which directory you are in.	Type pwd and press Enter .		
View directory co	ontents (ls)		
Function	Command	Example	Notes
View names of files and subdirectories in a directory.	Type Is and press Enter .		The Is command does NOT list any dot files (i.e., files that begin with dot (.)
To list files with status information	Type Is -I and press Enter .		The ls -l command lists the file name, its owner, date last changed, and size. Files that are directories are preceded with a "d"; plain files have an -rw
To easily view differences between files and directories.	Type Is -F and press Enter .		Directories will be listed with a "/."
To list ALL files, including Dot files.	Type Is -a and press Enter .		
Recursive file listing	Type Is -R and press Enter.		Lists the files in the current directory as well as those in the subdirectories.
Create Directory	(mkdir)		
Function	Command	Example	Notes
Create a directory	Type mkdir <directoryname> and press Enter.</directoryname>	mkdir playground To make a new directory called playground.	Once you've made the directory, use the Is command to verify.
Copy Files (cp)			
Function	Command	Example	Notes
To copy a file in the same directory.	Type cp <file> <file.copy> and press Enter.</file.copy></file>	cp resume resume.copy To make a copy of a file named "resume" in the same directory.	
To copy a file into another directory.	Type cp <file> <directory> and press Enter.</directory></file>	cp resume private	

to a new file in the same directory (i.e., rename a file). To move a file named "notes. yoe" file in a new location without to o file named "notes. working." In this case, mv is simply renaming the file. To move a file to a new file in a different directory To move a file to a new file in a different directory Remove a File (rm) Function Command Example To remove a file named "notes" from your home directory, while IN your home directory. To remove the file named "notes" from your home directory, while IN your home directory. To remove the file named "notes" from your home directory into your public directory, while IN your home directory. To remove a file named "notes" from your home directory. To remove a file named "notes" from your home directory, while IN your home directory. To remove a file named "notes.working" To remove the file named "notes.working" To invoke a prompt before removing a file; waits for a "N" response. Remove a Directory (rmdir) Function Command Example Notes Notes To remove a directory (that and press Enter. To remove a directory name and press Enter. To remove a directory file in a nubdirectory of your into your public directory (into your public directory into your public				
into another user's account. /-file> and press Enter. To copy a file named "notes" from your friend lae's account into your sample directory and name the file notes.joe. Move Files or Directories (mv) Function Command Example To move a file to a new file in the same directory (i.e., rename a file). To move a file to a new file in a new file in a new location without disturbing the original copy, move commands deletes the file. To move a file named "notes.joe" file in a new location without disturbing the original copy, move commands deletes the file. To move a file named "notes.joe" file in a new location without disturbing the original copy, move commands deletes the file. To move a file named "notes working." In this case, mv is simply renaming the file. To move a file named "notes working." In the new location without disturbing the original copy, move commands deletes the file. To move a file named "notes working." In the new location without disturbing the original copy, move commands deletes the file. To move a file named "notes yellow file in a new location without disturbing the original copy, move commands deletes the file. To move a file named "notes yellow file in a new location without disturbing the original copy, move commands deletes the file in a new location without disturbing the original copy, move commands deletes the file in a new file in a new location without disturbing the original copy, move commands deletes the file in a new file in a new location without disturbing the original copy, move commands deletes the file in a new file named "notes." file in a new file in a new file named "not				
To copy a file named "notes" from your friend lae's account into your sample directory and name the file notes.joe. Move Files or Directories (mv)	. ,	/ · · · · · · · · · · · · · · · · · · ·	cp ~juser/notes sample/notes.joe	
To move a file to a new file in a different directory To move a file to a new file in a different directory To move a file to a new file in a different directory To move a file named "notes.working," In this case, mv is simply renaming the file. To move a file named "notes.working," In this case, mv is simply renaming the file. To move a file to a new file in a different directory To move a file named "notes.working," In this case, mv is simply renaming the fire. To move a file to a new file in a different directory To move a file named "notes.working," In this case, mv is simply renaming the fire in a rew location. To move a file named "notes.working," In the new location. To move a file named "notes" To move a file named "notes.working the named "notes" To move a file named "notes.working in the fire in it in the new location. To move a file named "notes working in the fire in the new location. To move a file named "notes.working in the fire in the new location. To remove a file named "notes.working in the named "notes.working in the fire in the new location." To remove the file named "notes.working in the named "n		7 Sines and press Enter.	your friend Joe's account into your sample directory and name	
To move a file to a new file in the same directory (i.e., rename a file). To move a file named "notes.joe" of file in a new location without disturbing the original copy. To move a file named "notes.joe" of file in a new location without disturbing the original copy. To move a file named "notes.joe" of file in a new location without disturbing the original copy. To move a file named "notes.joe" of file in a new location without disturbing the original copy. The file in a different directory while in a different directory. To move a file named "notes" from your home directory, while IN your home directory, while IN your home directory, while IN your home directory. Remove a File (rm) Function Command Example To remove the file named "notes.working" To remove the file named "notes.working" To remove the file named "notes.working" To invoke a prompt before removing a file; waits for a "N" response. Remove a Directory (rmdir) Function Command Example Notes Remove a directory (that does not contain files). To remove a directory named "sample" which is a subdirectory of your directory, you must first moyour home directory (cd).	Move Files or Di	rectories (mv)		
to a new file in the same directory (i.e., rename a file). To move a file named "notes. working," in the name of incess, joe" to a file name will cation without of file name incess, or it in the new location. Simply renaming the file. To move a file to a new file in a different directory. To move a file and press Enter. To move a file named "notes, working," in the new location. To move a file and press Enter. To move a file named "notes" from your home directory into your public directory, while IN your home directory. Function Command Example To remove a file, named "notes" from your home directory, while IN your home directory. To move a file named "notes" from your home directory, while IN your home directory. To remove a file, named "notes" from your home directory, while IN your home directory. To remove a file, named "notes working file, named "notes, working" To remove the file named "notes, working" To invoke a prompt before removing a file; waits for a "notes, working" Function Command Example To remove a directory (that does not contain files). To remove a directory named "notes, working firetory named "sample" which is a subdirectory of your directory, you must first mo your home directory, named "sample" which is a subdirectory.	Function	Command	Example	Notes
to a new file in a different directory and press Enter. To move a file named "notes" from your home directory, while IN your home directory. Remove a File (rm) Function Command Example To remove the file named "notes.working file. To remove the file named "notes.working" To remove the file named "notes.working" To invoke a prompt before removing a file; waits for a "N" response. Remove a Directory (rmdir) Function Command Example Command Example Notes Remove a Directory (rmdir) To remove a directory named and press Enter. To remove a directory named is in a subdirectory of your directory that does not contain files). To remove a directory named "sample" which is a subdirectory (red).	to a new file in the same directory (i.e.,	1	To move a file named "notes.joe" to a file named "notes.working."In this case, mv is simply renaming	The difference between mv and cp is that cp places a copy of the file in a new location without disturbing the original copy. The mv commands deletes the file from its old location after saving it in the new location.
Function Command Example To remove a file. To remove the file named "notes.working" Prompt remove Type rm -i and press Enter. To invoke a prompt before removing a file; waits for a "N" response. Remove a Directory (rmdir) Function Command Example Notes To remove a directory (that does not contain files). To remove a directory named "sample" which is a subdirectory To remove a directory (cd).	to a new file in a different	1	To move a file named "notes" from your home directory into your public directory, while IN	The mv command is also used to move directories.
To remove a file. Type rm <file> and press Enter. To remove the file named "notes.working" To invoke a prompt before removing a file; waits for a "N" response. Remove a Directory (rmdir) Function Command Example To invoke a prompt before removing a file; waits for a "N" response. Remove a Directory (rmdir) Function Command Example Od [Enter] rmdir sample is in a subdirectory of your had directory, you must first mo your home directory (cd).</file>	Remove a File (r	m)		
file. To remove the file named "notes.working" To invoke a prompt before removing a file; waits for a " "N" response. Remove a Directory (rmdir) Function Command Example To remove a directory (that does not contain files). To remove a directory named "sample" which is a subdirectory To remove the file named "notes.working" To invoke a prompt before removing a file; waits for a " "N" response. Because the "sample" direct is in a subdirectory of your had directory, you must first mo your home directory (cd).	Function	Command	Example	Notes
Remove a Directory (rmdir) Function Command Example Notes To remove a directory (that does not contain files). To remove a directory (and press Enter. To remove a directory named "sample" which is a subdirectory removing a file; waits for a ""N" response. Remove a Directory (rmdir) Example Cod [Enter] rmdir sample is in a subdirectory of your find directory, you must first mo your home directory (cd).		Type rm <file> and press Enter.</file>	To remove the file named	
Function Command Example Notes To remove a directory (that does not contain files). To remove a directory name and press Enter. To remove a directory named "sample" which is a subdirectory Example Cod [Enter] remove a directory of your home directory, you must first moneyour home directory (cd).	Prompt remove	Type rm - i and press Enter .		removing a file; waits for a "Y" or
To remove a directory (that does not contain files). Type rmdir <directory name=""> and press Enter. To remove a directory named directory, you must first mo your home directory (cd).</directory>	Remove a Direct	ory (rmdir)		
directory (that does not contain files). To remove a directory named "sample" which is a subdirectory is in a subdirectory of your home directory, you must first mo your home directory (cd).	Function	Command	Example	Notes
	directory (that does not		rmdir sample To remove a directory named "sample" which is a subdirectory	Because the "sample" directory is in a subdirectory of your home directory, you must first move to your home directory (cd).

To force
