

CSI020 – An Introduction to the *Sunfire* Programming Environment

(http://www.comp.nus.edu.sg/~cs1101x/3_ca/labs/lab0/unix_intro.html)

Host name: sunfire-r.comp.nus.edu.sg

Command		Note	Example
date	Query system's date		date Monday, August 21, 2017 08:12:54 PM SGT
echo ...	Simply "prints" whatever parameters you have typed after the echo command	A single-worded instruction to be followed by a number of parameters, each separated by one or more spaces	echo "Hello there" Hello there
			echo Hello there echo Hello there Hello there
			The two words "Hello" and "there" were treated as 2 parameters, it doesn't matter how many spaces separates them.
			echo "Hello\nthere"
			Special character "\n" is a newline character to indicate that whatever output that follows should begin on a new line.
	Create a simple test data file	Use ">" character	echo "The quick brown fox jumps over the lazy dog." > fox.dat
			The string is redirected by ">" into a named file "fox.dat"
cat ...	Display the entire contents of a file (usually a text file) to the shell window		cat fox.dat The quick brown fox jumps over the lazy dog.
			Printing (to screen) the contents of a text file
echo ... >> ...	Appends more lines to an existing file	Use a double-redirect operator	echo "While it sleeps." >> fox.dat echo "While it sleeps." >> fox.dat cat fox.dat The quick brown fox jumps over the lazy dog. While it sleeps. While it sleeps.
... < ...	Redirect input from a file	Use "<" character	
history	Gives list of history of commands		

ctrl-c	Sends program the “interrupt” signal		
ctrl-\	Sends the program a stronger signal that it should really die		
ps -fu e0104958	Queries the process number (PID) and kill it		
kill <process num>			
ctrl-z	Suspends the currently running program in the shell		
jobs	Tells you what processes are stopped		
fg	Resumes the process		
fg <job num>	For more than one process stopped		
bg	To put the process in the background		

ls	Lists directory contents		ls -l
			drwx----- 2 e0104958 nusstu 4096 Aug 15 13:20 doc
			Lists contents in “long” format – file type, permissions, ownership information, and date and time the file was last modified
			ls -a
man ...	Online help facility in the form of pages from the system documentation – manual pages	To find more, type the name of the utility as the argument	Lists “hidden” files – files beginning with a “.”
			man ls
			User Commands ls(1)
			NAME ls - list contents of directory ...
			If the man page spans more than one screen space, the display is automatically paginated – press “f” (or “space”) to scroll and “b” to scroll back
			man -k <keyword>
			When the exact command name is not know, the man pages can be queried by keyword

chmod	“Change mode” – sets the access permissions	u	Yourself	chmod a+r fox.dat
		g	Group of users	
		o	Other users	
		a	Everybody	
		r	Read – people with access can read the name of the files in the directory, i.e. able to ls the directory	
		w	Write – people with access can change the directory, i.e. can create and remove files in it	
		o	Execute – people with access can cd to it, i.e. make this directory their current directory	
		Arranges for everyone (“a”) to also be able to read (“+r”) the file		
		chmod go-r fox.dat		
		Withdraws the read access from all “others” but yourself		
		chmod go-rwx ~		
Removes all permissions from group and others on your home directory				