LING 1340/2340 - Data Science for Linguists 26 March 2020 Jevon Heath's Whirlwind Tour of bash

0) Preliminaries

- Go to http://www.gutenberg.org/ebooks/11 and download the Plain Text UTF-8 version, saved to your Desktop. Rename it 'alice.txt'.
- Go to http://norvig.com/ngrams/ and download 'enable1.txt', saved to your Desktop.

1) Navigation

pwd	pwd			
cd	cd ∼		pwd	
<tab></tab>	cd [original folder]		cd .; pwd	
ls (-lhA)	ls	ls -a	ls -A ls -l	
(up-arrow and down-arrow) <ctrl>+C <ctrl>+L</ctrl></ctrl>	asdf;lkajs	df;lkajsdf;l	·	

[How do you handle spaces in file names?]

2) Customization

alias	alias calc='/c/windows/system32/calc.exe'
	alias
	alias ls='ls -lhAFcolor=tty'
	alias grep='grepcolor'
.bash_profile (login)	cd ~; nano .bash_profile
.bashrc (non-login)	nano ~/.bashrc

3) Searching

J) ocurcining		
whereis	whereis pip	
which	which pip	
echo	echo \$PATH	
locate	locate alice.txt	
find	find ~ -name 'alice.txt'	

4) Moving files

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touch	touch dummy.txt
ср	cp dummy.txt dummier.txt
mv	<pre>mv ~/Desktop/alice.txt ./alice.txt</pre>
rm	rm dummier.txt
mkdir	mkdir folder
rmdir	rmdir folder
rm -v	mkdir folder; touch folder/dummy.txt
	rmdir folder rm -rv folder

5) Examining text files

WC	wc alice.txt	
	wc -l alice.txt	
head (-n)	head -8 alice.txt	
tail (-n)	tail -6 alice.txt	
cat	cat alice.txt	
more or less	less enable1.txt	(Space, b, q to navigate)

6) Piping

>	echo "I am a cat" > cat.txt
	cat alice.txt wc > alicecount.txt
>>	echo "He is too" >> cat.txt; cat cat.txt

7) Regular expressions

1) regular expressions	
grep (-in)	grep "^o.*o\$" enable1.txt
dos2unix	dos2unix enable1.txt
grep -P	<pre>grep -P '[aeiou]{5,}' enable1.txt</pre>
grep -v	grep 'q' enable1.txt grep -v 'u'
Plus piping:	<pre>grep '^un.*able\$' enable1.txt > able.txt</pre>
	<pre>grep '^in.*able\$' enable1.txt >> able.txt</pre>
grep -l	grep -l 'Alice' *.txt

8) Text manipulation

o) Text mampu			
sort (-r)	sort cat.txt		
cut	cp Licensed-Data-Sets/ETS Corpus of Non-		
	Native_Written_English/data/text/index.csv ./ETSinde		
	X.CSV		
	cut -d, -f3 ETSindex.csv > ETSlangs.txt		
uniq (-c)	sort ETSlangs uniq -c		
	head -3375 alice.txt tail -3345 perl -npe		
's/\s+/\n/g' sort grep '\S' uniq -c sort			
	head -30		

9) Other useful commands - check them out!

man	do and done	diff	file	
ps	(&)	info	date	
ps tac	history	ssh	ln	
time	awk and sed	bind	join	
apropos	lsof	fold	type	