**Exam Review**

* Use `…` to substitute a command result to a string
* Arithmetic for increment: a = 5 🡺 a = a + 3 or expr \( 2 + 3\) \ \*5 or let x = (2+3)\*5
* Use cut to extract fields and character from file. User must specify how the program can cut the file. Ex. Cut -d’ ‘ -f2,5 filename
* Use wc for display the count. -l for number of lines, -w for number of words, -m for number of character, -c for number of bytes, -L for length of the longest line
* Piping is an act of having multiple command in one line, separate by command “|”. The result of command on the left will be use for the next one on the right.
* > to direct result or information to a file, >> to append the data. Redirecting error using 2> or 2>> /dev/null
* Command grep use to search for string in a file and display it, such as grep friend friends.txt will list all the string has “friend” on it
* -NR: line number of current record ; -NF: number of fields in current record
* awk 'NR == 2, NR == 4' cars 🡺 display from line 2 -> 4
* awk 'NF != 5' cars 🡺 display without line 5
* awk -F':' '{print $6}' /etc/passwd 🡺 display column $6 seperated by deliminator “:”
* awk ‘$2 ~ /[0-9]/’ cars 🡺 find value of 0->9 in $2
* awk '{OFS="~"; print $1, $2}' cars 🡺 separate field $1 and $2 by ~
* sed '5,8 s/[0-9]/\*/g' cars 🡺 substitute all number (by using g) with \*, from line 5->8
* sed 's/^./\t&/' cars 🡺 substitute a tab if detect a line has a character
* awk 'BEGIN {print “REPORT TITLE”} /re/ { execution } END { print “END OF REPORT” }' filename
* shopt -s to set shell option and shopt -u to unset shell option
* tput information <https://learn.senecacollege.ca/ultra/courses/_615206_1/cl/outline>
* procedure only execute command in the sub-program (proc\_name())
* a function must return a value (func\_name())
* use declare -l or local to make the variable local in the sub-program



 

 



