**Exercises: Procesado y Manejo Masivo de Datos**

**PART 2**

**MORE ON FILTERS**

**Ex 1.**

* **List all the processes of the system:** ps -ef
* **List all the processes for the current user:** ps-ef | grep elena\_aguayo

(ps -U elena\_aguayo -u elena\_aguayo u)

* **List the 10 newest processes for the current user:** ps -ef | grep elena | sort -k5,5 | tail -10
* **Display de manual pages por the grep command using at most 100 chars per line:** man grep | fmt -100
* **Same as before but substituting any digit by an Asterisk(\*):** man grep | fmt -100 -s | tr ‘[0-9]’ | ‘\*’
* **Same as before but sending the result to a file:** man grep | fmt -100 -s | tr ‘[0-9]’ | ‘\*’ > file.txt

**Ex 2.** **Extract the columns 6 and 4 (in this order) of file  
*adult.data*, not necessarily with a single line command**

**Ex 5. Repeat the first example of previous slide, but display  
only the key and the field 2 of the second file (*f17.txt*)**

join -t "," -1 2 -2 2 -a 2 f13.txt f17.txt

**Ex 6. Write shell commands to perform the following  
actions:**

* **Create a file *a.txt* with 20 random numbers between 0 and 100,  
  without repetition; each number must be in a different line**

echo {0..100} | tr ' ' '\n' | shuf -i 0-100 | head -20 > a.txt )Podría haber puesto shuf –i 0-100 al principio y ya)

* **Create a second file *b.txt* also with 20 random numbers  
  between 0 and 100, without repetition; each number must be  
  in a different line**

echo {0..100} | tr ' ' '\n' | shuf -i 0-100 | head -20 > b.txt

* **Display the numbers that appear in both files**

comm -3 a.txt b.txt

Ex 7. **Write a shell script that accepts 3 arguments: *f*, *a*, *b*. The argument *f* is the name of a *csv* file; the arguments *a* and *b* are integer numbers. The script must display the list of values that appear in (both) columns *a* and *b* of file *f*.**

**TEXT EDITORS**

**Ex. 8. How can you open the vi editor placing the cursor at the end of the file?**

**Ex. 9. How can you undo the last change in the vi editor?**

**Ex. 10. What is the meaning of the command: %s/hola/adios/gc in the vi editor?**

**Ex. 11. In vi, which commands do you use to copy the current line just below?**