

IE-0117 Programación bajo Plataformas Abiertas

Laboratorio 3: bash

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1. Enunciado

Instrucciones Generales:

Los laboratorios se deben de realizar de manera individual.

Entregue un archivo comprimido que incluya un directorio llamado **informe** con los archivos necesarios para generar el PDF del informe (.tex, imágenes, código, entre otros). El informe debe contener la documentación necesaria que demuestre que se llegó a una solución satisfactoria de los problemas planteados.

Responda las siguientes preguntas sobre el uso de **bash**.



1. How to write shell script that will add two numbers, which are supplied as command line argument, and if this two numbers are not given show error and its usage
2. Write Script to find out biggest number from given three numbers. Numbers are supplies as command line argument. Print error if sufficient arguments are not supplied.
3. Write script to print numbers as 5,4,3,2,1 using while loop.

4. Write Script, using case statement to perform basic math operation as follows:

- + addition
- - subtraction
- x multiplication
- / division

The name of script must be 'calcu' which works as follows

```
$ ./calcu 20 / 3, Also check for sufficient command line arguments
```

5. Write Script to see current date, time, username, and current directory

6. Write script to print given number in reverse order, for eg. If no is 123 it must print as 321.

7. Write script to print given numbers sum of all digit, For eg. If no is 123 it's sum of all digit will be $1+2+3 = 6$.

8. Write script to determine whether given file exist or not, file name is supplied as command line argument, also check for sufficient number of command line argument

9. Write script to print contains of file from given line number to next given number of lines. For e.g. If we called this script as Q13 and run as

```
$ Q13 5 5 myf
```

Here print contains of 'myf' file from line number 5 to next 5 line of that file.

10. Write script called sayHello, put this script into your startup file called .bash_profile, the script should run as soon as you logon to system, and it print any one of the following message in infobox using dialog utility, if installed in your system, If dialog utility is not installed then use echo statement to print message :

```
Good Morning
Good Afternoon
Good Evening
```

According to system time.

11. Write shell script to show various system configuration:

- a) Currently logged user and his logname
- b) Your current shell
- c) Your home directory
- d) Your operating system type
- e) Your current path setting

- f)* Your current working directory
- g)* Show Currently logged number of users
- h)* About your os and version, release number, kernel version
- i)* Show all available shells
- j)* Show mouse settings
- k)* Show computer cpu information like processor type, speed etc
- l)* Show memory information
- m)* Show hard disk information like size of hard-disk, cache memory, model etc
- n)* File system (Mounted)



2. Consideraciones

- **Laboratorio individual**

- Genere un reporte en L^AT_EX que incluya su código, su abordaje para la solución y sus conclusiones.
- Suba su código y documentación (doxygen, README, INSTALL) al git respectivo de su grupo y el directorio del laboratorio. Use su número de carné para diferenciar los trabajos de su grupo.
- Cada estudiante debe subir el reporte a Schoology.
- Recuerde que por cada día tardío de entrega se le rebajaran puntos de acuerdo con la formula: 4^d , donde $d > 1$ es la cantidad de días tardíos.