**Week7day2 HW**

1. What is the difference between front end and backend application?

Front end is the visual part of an application or website that users see and use. Back is everything that is developers or DevOps engineers do behind the scenes to pull out the visual part use part clients.

1. What is the meaning of GUI and CLI?

GUI means graphical user interface and CLI means command line interface.

1. What is shell in Linux, how to check the list of all shells and the default one?

Shell is an interface that we use to interact with the operating system.

Cat /etc/shells

Echo $SHELL

1. How to list the different environment variables?

By running the command env

1. How can I get a short cut of a command which is not easy to remember like getconf LONG\_BIT or if it is use more often?

I will type for example get on my keyboard and press tab 2 times it it will list all the commands and I will choose what I want. It is better to set it as temporary or permanent alias

1. Why and how do we comment a line in shell? How do you manage when it exceeds one line?

We comment a line when we don’t want to run that specific line or block of lines while running our script. Hashtag symbol in front of the line or lines

1. What is the shortcut to comment one or multiple lines?

Ctrl+/

1. Define variable and how do we set one?

Input variable is any information that the program receives to read or execute.

A place holder of something, a string to which we assign a value.

By assigning to a word or string a value

VARNAME=’’VALUE’’

1. Define input variable, environment variable, user define variable, and how to set them?

Input variable is any information that the program receives to read or execute.

Users defined variable is a variable defined by the users it can be local variables or global variable.

Environment variable are variables stored within a system and used by applications launched in shells.

1. What is exit code and possible values, meaning of exit code of 0 and how to check those value?

The exit code is 0 0 when it is successful but can also ranges from 1 to 255

To check it we must run the command echo $?

1. What is /Dev/null, STDIN, STDOUT, STDERR?

STIDIN standard input

STDOUT standard output

STDERR standard error

/Dev/null it uses to discard any output or error of a script.

1. How to redirect the error only then both the error and output of the ls -ltr command?

Ls -ltr &>/dev/null for both and Ls -ltr 2>/dev/null

1. How can we check the list of operators, expression, and description available in your system?

By running man test command and expr --help

1. Provide the list of some relational operators that you know.

Equal to -eq, Not equal to -ne, Greater than -gt, Less than -lt, Greater than or equal to -ge, Less than or equal to -le.

1. What are Boolean operators?

Are useful in programming language and we have two, true or false.

1. List and explain the meaning of the logical operators and represent them.

Logical operators are useful when multiples conditions are used in the programs.

For example, we can set thing the way that information that we receive on the website or application are true if they meet some conditions. If we ask for username and password, the return will be true if the user put proper username and password. Because we first wanted the user to fulfill all the conditions to get access this is an ‘AND’ condition. We also have ‘OR’ conditions.