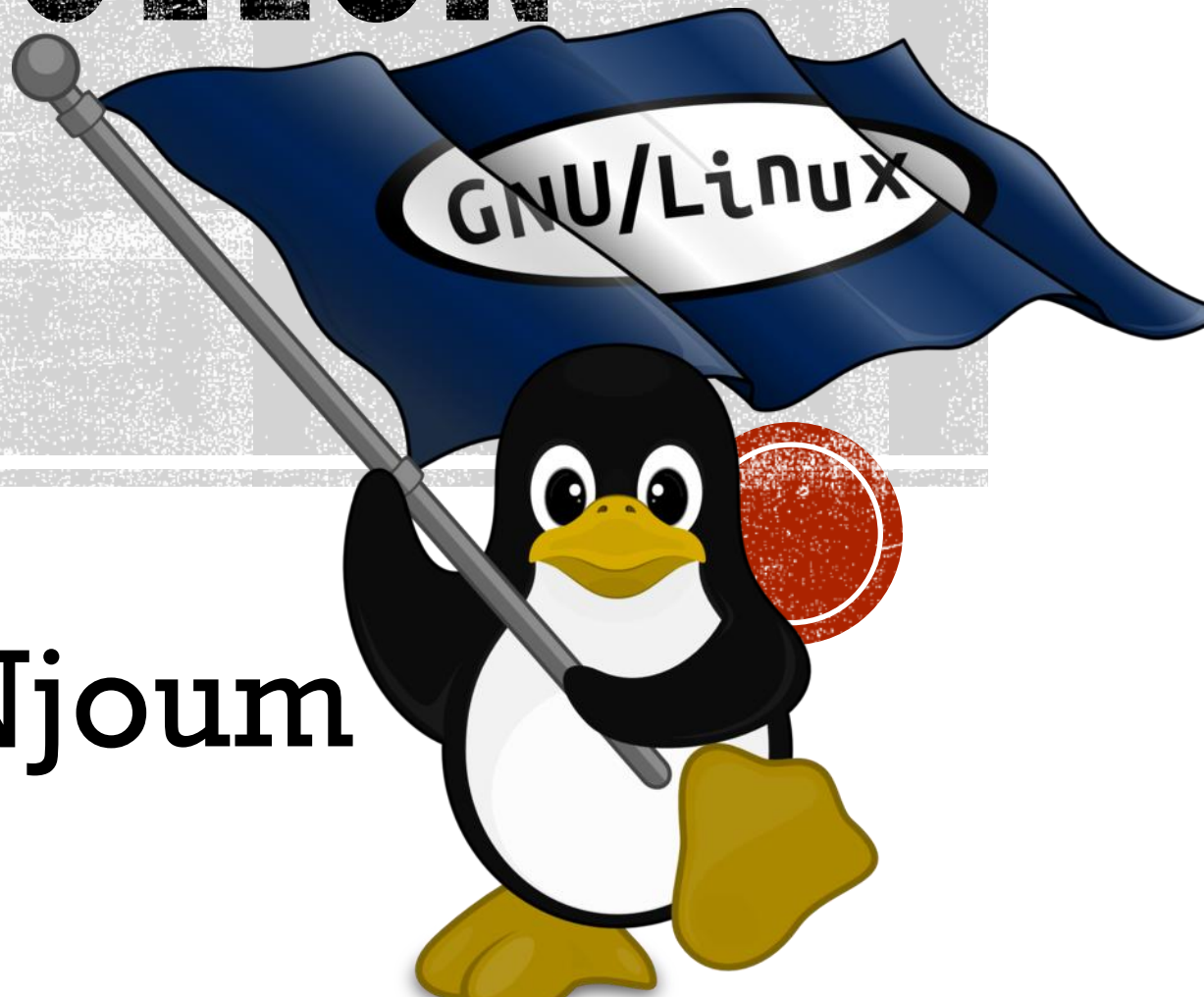
LAB9. SHELL SCRIPTS (I) INTRODUCTION



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Objectives

After completing this lab, the student should be able to:

- Create and execute simple shell scripts.
- Use positional parameters and shifting to pass command line arguments to scripts.

CREATE STUDENTS FILE(USING VI)

Example 1:

```
vi myfirst
echo this is my first Linux script
echo I like it
echo bye
```

:wq (save and quit)

chmod +x myfirst

PATH=$PATH:. Or **.bash_profile**

Typing its name on the command line as follows:

myfirst

What was the result of running the script?

_____

EXECUTE THE SCRIPTS:

Ex2. **vi greetings**

```
echo What is your name
read name
echo hello $name
:wq
```

```
chmod +x greetings
greetings
```

What do you think is the purpose of the read command?

EX3:

- ***vi delete***

```
echo Enter file name:
read filename
rm $filename
echo File $filename has been
deleted
```

:wq !

QUESTION: WRITE SCRIPT TO COPY FILE FROM SOURCE TO DESTINATION ?

copy
Enter source file name:
one
Enter destination file name:
two
File one is copied to file two

```
echo Enter source file name:
read one
echo Enter destination file name:
read two
cp $one $two
echo File $one has been copied to $two
```

EX4.

- **vi params**

```
echo $1
echo $3 $2
echo $#
echo $0
echo $5
echo $*
:wq
```

- ***params one two 3 four 5 6 bye***

What was the output?

$1: **First Passed parameters**

$3: **Third Passed parameters**

$*: **all parameters**

$#: **number of parameters**

$0: **the file name of the current script**

```
one
3 two
7
./params
5
One two 3 four 5 6 bye
```

TRY TO MAKE CONFIGURATION TO PERVIOUS FILES

rewrite both the delete and copy scripts above to run as follows:

delete file1

file1 has been deleted

```
rm  $1
echo file $1 has been deleted
```

```
cp $1 $2
echo File $1 has been copied to $2
```

QUESTION (3 POINT)

- ***Write a script called whoisuser that takes the login name of a user as a parameter and then uses the /etc/passwd file to get and print the full name of that user as follows:***

whoisuser u1122334
u1122334 = Ahmad Hamdan

```
echo $1=$(grep $1 /etc/passwd |cut -d : -f5 |tr '_' ' ')
```

SHIFTING PARAMETERS

- ***vi params***
  echo $1
  shift 2
  echo $3 $2
  echo $#
  shift
  echo $0
  shift 3
  echo $1
  echo $*

  :wq

```
one
5 4
9
./params
seven
seven 8 9 ten bye
```

params one two three 4 5 6 seven 8 9 ten bye

Which parameter is not effected by the shift command? ***$0***

COMMENTS

Lines that start with (#) are interpreted as **comments** except in one case where shells have (**#!**) followed by the name of a shell as the first line of a script.

- **Example:**
  If your script starts with the line:
  #!/bin/bash
  Then the script is meant to be executed using the **/bin/bash** shell.

Check out the following system scripts:

more /etc/rc.sysinit

more /etc/rc.local

What is the first line in those files (scripts)?

_____

What is the difference between the first line and the few lines that come after it?

_____

QUIZ TIME!

PUZZLE QUIZ GAME IN CLASS

Directions:

1. Quiz is practical (at your machine in lab).
2. It's open book or notes, internet not allowed.
3. True run commands are only accepted.
4. Points are: 2 points or 3 points

6. Time *expired* within 3 minutes, not extension allowed.

7. 1st, 2nd students whom complete the task will get full mark, others will loose marks (-1,-2,-3,…etc.)

QUESTION 1:

(2 points) Write a function that takes a triple filename as an argument and adds execute permission to the file for the user and the group.

QUESTION 2:

- ***(5 points)*** Write a Bourne shell script that takes a login name as its argument and display the number of terminal with user is logged on to in a LAN environment.

whatisterminal u1122334
u1122334 terminal number is 24

QUESTION 3:

- ***(5 points)*** Write a shell script that displays the names of all directory of your home directory (*not files or hidden directory*) in descending order

QUESTION 4:

(5 points) Write a Bourne shell script **phonenumber username** that's print an home phone number for that user


Well Done!