



DEVOPS SEMINAR

SCRIPTING



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Unless stated otherwise, you must use a Debian Bullseye environment for today's task.

Task 00 - Preliminary

Create a virtual machine without a GUI `vm-server`.

Create a user `nsapoolday08` with password `T0dayIt3ScRipting`.

The home directory of user `nsapoolday08` must be `/home/nsapoolday08`.



From now on all the files you are asked to create must be located here `/home/nsapoolday08/script`

Task 01 - Script 1 - Calc

Create a file `script1.sh`.

Create a script in which two operand numbers and an operator sign (+-*/) must be given as parameters, or entered.

The script must perform the desired operation.

The output of the script must respect the following format:

```
Terminal
T-NSA-500> ./script1.sh 45 + 2
Result: 47
```

Task 02 - Script 2 - Menu

Create a file `script2.sh`.

Your script should display a menu that allows a user to choose an option:

- ✓ if the user chooses option 1, the function should check if a user exists ;
- ✓ if the user chooses option 2, the function must return the UID of a user ;
- ✓ the option 'q' must allow the user to quit the program.

```
Terminal
T-NSA-500> MENU:
1. Verify user exists
2. Check UID
q. Exit
```



read function

Task 03 - Script 3

Create a `script3.sh` file. This script must:

- ✓ accept as parameter the path of a file `epitech.txt` located in `/tmp` ;
- ✓ count the number of lines in the file `/tmp/epitech.txt` ;
- ✓ count the number of times the word `epitech` appears ;
- ✓ display in the console the lines where the word `epitech` appears and write the same thing in a new file `/tmp/epitech2.txt`.

The output of the script must respect the following format:

```
Terminal
T-NSA-500> There are 25 lines in the file.
The word epitech appears 5 times.
XXXXXX epitech WWWWWWWWW
epitech XXXXX XXXX XXXXX XXXXX
DDDDDD DD LLLL EEEE epitech
JJJJJJJJJJ jjjj kKKK epitech KKKK
MMMMM epitech JJJJ KKKK EEE LLL MMMMM
```

Task 04 - Script 4

Create a file `script4.sh`.

Your goal is to create a script to help you get basic information about your system.
The output of your script must match the model below:

```
Terminal
T-NSA-500> SYSTEM
Hostname: build-subject
Manufacturer: Oracle Corporation
Product name: VirtualBox
Version: 1.2
Serial number: 0
Operating system: Debian GNU/Linux 11 (bullseye)
Kernel: 5.10.0-19-amd64
Architecture: x86_64
PRIVATE NETWORK INFORMATION
lo 127.0.0.1/8
lo::1/128
enp0s3 192.168.1.17/24
enp0s3 2a01:cb10:f7c00:a00:27ff:fe93:d7e5/64
enp0s3 fe80::a00:27ff:fe93:d7e5/64
docker0 172.17.0.1/16
PUBLIC IP ADDR
90.126.151.238
DNS
nameserver 192.168.1.1
CPU USAGE
Model name: It(R)Cr(TM)i7-9750H CPU@2.60GHz
CPU frequency: 2592.000
CPU cores 1
DISK SPACE INFO
Free space /home: 12G
Free space /tmp: 327M
```

Task 05 - Script 5

Create a `script5.sh` file.

This script must retrieve successful or failed connection attempts through ssh.

The script takes as parameter either:

- ✓ **ACCEPTED**: the script returns the following output which is in CSV format with a semicolon as separator: `ACCEPTED;192.168.1.10;jboz`
- ✓ or **FAILED**: the script returns the following output which is in CSV format with a semicolon as separator: `FAILED;192.168.1.10;nau_is_the_king`

If no parameter is passed, then the script must exit with 0.



{EPITECH}
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