

SE Factory

Day 2 - Assignments

version 02BD_1603

Delivery Deadline: Tuesday July 19th EOD

Development Environment Setup

1. Download and install Sublime Text 3

Shell Scripting

Exercise 1

Develop a shell script for the bash shell that can be executed from *any directory*, it should:

1. Retrieve all the `.log` files from the directory `/var/log`
2. Store the results in a `csv file` (csv stands for Comma Separated Value) in the directory `/home/<username>/Desktop/` along with each log file's respective file size in kB
3. The output file should be named `log_dump.csv`

Example output: (Content of the file)

```
alternatives.log, 24
apport.log, 4
auth.log, 24
boot.log, 4
bootstrap.log, 64
dpkg.log, 1272
fontconfig.log, 4
gpu-manager.log, 4
kern.log, 784
pm-powersave.log, 16
vmware-install.log, 4
vmware-tools-upgrader.log, 4
Xorg.0.log, 68
```

Exercise 2

Develop a shell script for the bash shell that acts as a virtual memory and disk space monitor. It should be executed from *any directory*, and:

1. Retrieve the current Virtual Memory utilization value
2. Retrieve the current Used Disk Space values (for all mounted drives)
3. If any of the values is higher than or equal to 80%, raise an alarm:

```
ALARM: Virtual Memory is at 95%  
ALARM: Disk /dev/sda1 is at 85%
```

4. If none of the values is higher than or equal to 80% utilization, output Everything is ok

Example output (Terminal output)

Sample 1

```
Everything is OK
```

Sample 2

```
ALARM: Virtual Memory is at 84%
```

Exercise 3

Install `tmux` and split the terminal into 3 vertical panes and 2 horizontal panes. Now, navigate between them using the keyboard shortcuts.

Changelog

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- Changed the requirement of Exercise 2 from "Free Disk Space" to "Used Disk Space"