ANNEX A · CONFIGURING THE SYSTEM BY COMMAND

Name: _____ **Date:** _____

Work in your VM `deb-lab`, in a terminal, with your own user. Type the commands; write the answers on this sheet.

1 **The name of the machine.** Run `hostnamectl`. Static hostname: _____
Change it: `sudo hostnamectl set-hostname deb-yoursurname` (small letters, no spaces).
Then `sudo nano /etc/hosts` and change the old name in the line that starts with `127.0.1.1`.
DONE WHEN A **new** terminal shows the new name in the prompt, and `sudo true` prints no warning.
Then put the name `deb-lab` back in both places: the other handouts of the course use it.

2 **The clock.** Run `timedatectl`. Time zone: _____ Synchronised? _____
`sudo timedatectl set-timezone America/New_York` and then `date`. How many hours changed? _____
Did the line Universal time change? _____ Set it back: `sudo timedatectl set-timezone Europe/Madrid`
DONE WHEN `timedatectl` shows `Europe/Madrid` again.

3 **The locale.** Run `locale`. Your `LANG` is: _____
`sudo nano /etc/locale.gen` → delete the `#` in front of `ca_ES.UTF-8 UTF-8` and `es_ES.UTF-8 UTF-8`. Save.
Then `sudo locale-gen`.
Run `date`, then `LC_TIME=ca_ES.UTF-8 date`. What changed?

_____

DONE WHEN `locale -a` lists `ca_ES.utf8` and `es_ES.utf8`.

4 **Variables.** Run `echo $USER $HOME $SHELL`. Then, one by one:
`COURSE=SI` `bash -c 'echo $COURSE'` → it prints: _____
`export COURSE` `bash -c 'echo $COURSE'` → it prints: _____
In your own words, what does `export` do?

_____

DONE WHEN The second `bash -c` prints `SI`.

5 **PATH.** Run `echo $PATH | tr ':' '\n'`. How many directories? _____ Which is searched first? _____
`type ls` says: _____
`type cd` says: _____ `which python3` says: _____
DONE WHEN You can say in which directory the file of `python3` is.

6 **Your own command.** `mkdir ~/bin`, then `nano ~/bin/hello` and type these two lines:

```
#!/bin/bash
echo "Hello from $(hostname), it is $(date +%H:%M)"
```

Save. `chmod +x ~/bin/hello`. Now type `hello`. The message is: _____
Type `~/bin/hello`. Does it work? _____ Now `export PATH="$HOME/bin:$PATH"` and `hello` again.
Why did the first try fail?

_____

DONE WHEN `hello` prints the greeting, and `type hello` shows the path of your file.

7 **Make it permanent.** Type `alias ll='ls -la'` and try `ll`. Open a **new** terminal: does `ll` exist there?
_____

`nano ~/.bashrc` (no `sudo`). Go to the end and add two lines: `alias ll='ls -la'` and `export EDITOR=nano`.
Save, then `source ~/.bashrc`.

DONE WHEN In a new terminal, `type ll` answers that `ll` is aliased to `ls -la`, and `echo $EDITOR` prints `nano`. Your neighbour checks it.

8 **The same on Windows.** Write the letter of the PowerShell line next to each Bash line.

_____ `hostnamectl set-hostname ws-marta`
_____ `timedatectl set-timezone Europe/Madrid`
_____ `locale`
_____ `echo $PATH`
_____ `export COURSE=SI`
_____ `alias ll='ls -la'`

A `$env:Path`
B `Set-Alias ll Get-ChildItem`
C `Rename-Computer -NewName "WS-MARTA"`
D `Get-Culture`
E `Set-TimeZone -Id "Romance Standard Time"`
F `$env:COURSE = "SI"`

DONE WHEN Six letters, each used once.

Exit ticket. Circle one answer.

1. Where is the hostname of a Debian machine stored?
   a) `/etc/hosts` b) `/etc/hostname` c) `~/.bashrc` d) `/etc/passwd`
2. You set the time zone to `America/New_York`. What happens to the clock the kernel keeps (UTC)?
   a) It goes 6 hours back b) It stops until NTP answers c) Nothing: only the way it is shown changes d) It is reset
3. `backup` gives “command not found”, `/opt/tools/backup` works. The cause is:
   a) `/opt/tools` is not in PATH b) the file is not executable c) the file is empty d) it needs `sudo`
4. You type `COLOUR=blue` and start a script from that terminal. The script prints `$COLOUR` empty. Why?
   a) Variables need capital letters b) Scripts cannot read variables c) The value needs quotes d) It was not exported
5. In which file do you write an alias so that every new terminal has it?
   a) `/etc/hostname` b) `~/.bashrc` c) `/etc/locale.gen` d) `~/.bash_history`