ANNEX A · WHERE IS MY FILE?

Name: _____ **Date:** _____

PART 1 · MY EXAM: ERROR LOG (10 MIN)

Choose the **two** questions where you lost most marks. For each one, circle the kind of error and write the right answer **in your own words**.

Question no. _____ Why (circle): did not know it · misread it · careless · no time

The right answer is:

_____

_____

Question no. _____ Why (circle): did not know it · misread it · careless · no time

The right answer is:

_____

_____

One thing I will do differently in the next exam:

_____

PART 2 · FOLLOW ONE FILE TO THE METAL (22 MIN)

Work inside the virtual machine **deb-lab** (steps 1–7), then on the host (step 8). Type the commands **exactly** as they are written, capitals and spaces included. `~` means "my home folder".

1 Open **Text Editor**, type `hello` and save the file as `hello.txt` in **Documents**.
DONE WHEN The app Files shows `hello.txt` inside Documents.

2 In Files: right-click the file → **Properties**. Size: _____ bytes

3 Open **Terminal** and type:

```
ls -l ~/Documents/hello.txt
```

Which number in the line is the size in bytes? _____
DONE WHEN The number is the same as in step 2.

4 Now ask how much space it really takes on the disk:

```
du -h ~/Documents/hello.txt
```

Space on disk: _____ Why is it bigger than the size?

_____

5 Ask the file system for the file's record:

```
stat ~/Documents/hello.txt
```

Inode (its number in the inventory): _____ IO Block: _____ bytes

6 Which partition holds the file?

```
df -h ~/Documents/hello.txt
```

Filesystem: `/dev/`_____ Mounted on: _____

7 Which disk holds that partition?

```
lsblk
```

Disk name: _____ Disk size: _____

DONE WHEN The partition of step 6 hangs under this disk in the `lsblk` drawing.

8 Leave the VM. On the **host**, in the window of the virtual machine: **Show virtual hardware details** (light bulb) → click the **disk** in the list on the left → find **Source path**. Copy it:

_____

DONE WHEN The path ends in `.qcow2`: the whole disk of deb-lab is one file on the host.

Write the chain, from your file down to the real hardware:

`hello.txt` → _____ → _____ → _____ → _____ → _____ → _____ → the real SSD

PART 3 · EXIT TICKET (ALONE, NO NOTES)

1. The inventory that says which blocks belong to which file is the…

- **A** partition
- **B** directory
- **C** file system
- **D** disk

2. A file of 6 bytes, on a file system with blocks of 4 KiB, takes on the disk…

- **A** 6 bytes
- **B** 4 KiB
- **C** 8 KiB
- **D** nothing until it grows

3. On the host, the whole disk of the VM `deb-lab` is…

- **A** one file
- **B** one partition of the real SSD
- **C** one directory full of small files
- **D** a second SSD

4. From the smallest to the biggest:

- **A** disk, partition, file system, directory, file
- **B** file, file system, directory, disk, partition
- **C** directory, file, partition, file system, disk
- **D** file, directory, file system, partition, disk