≡ **Challenges - System Administration**

**How to solve these challenges:**

- To be consistent with the filenames and paths run the commands on Ubuntu
- Write your solution **in a terminal** and **test it.**
- If your solution is not correct, then try to understand the error messages, watch the video again, rewrite the solution, and test it again. Repeat this step until you get the correct solution.
- **Save** the solution in a file for future reference or recap.

**Challenge #1**

- For the currently logged-in user, create a cron job that writes the current date and time to a file every 3 minutes.

**Are you stuck?** Do you want to see the solution to this challenge? Click here.

**Challenge #2**

- Create a cron job that runs as root and fully upgrades the system every Sunday at 5:10 AM

**Are you stuck?** Do you want to see the solution to this challenge? Click here.

**Challenge #3**

- Identify the partition where the root file system (/) is mounted.
- Create a directory on the Desktop and mount that partition there as well.

**Are you stuck?** Do you want to see the solution to this challenge? Click here.

**Challenge #4**

- Consider this iso file.
- Mount it to a directory in the user's home directory.

**Are you stuck?** Do you want to see the solution to this challenge? Click here.

**Challenge #5**

- Install the **nginx** web server.
- Check that it's running.
- Set the server NOT to start automatically when the computer boots up.

**Are you stuck?** Do you want to see the solution to this challenge? Click here.

**Note:** For the following challenges, if possible, you should run the commands on a system where Linux runs as the main OS.

**Challenge #6**

- Generate an HTML file that contains complete hardware information.

**Are you stuck?** Do you want to see the solution to this challenge? Click here.

**Challenge #7**

- Find out what is the maximum RAM memory that can be installed on the system.
- Find out the amount of RAM memory that is already installed on the system.
- Display the amount of RAM memory that is free and used (by the running system).

**Are you stuck?** Do you want to see the solution to this challenge? Click here.

**Challenge #8**

- Display as much information as possible about the WiFi card.

Note: You should run the commands on a system where Linux runs as the main OS.

**Are you stuck?** Do you want to see the solution to this challenge? Click here.

**Challenge #9**

- Display as much information as possible about the hard disks.

**Are you stuck?** Do you want to see the solution to this challenge? Click here.

**Challenge #10**

- Benchmark the read speeds performance of the disks installed on your system.

**Are you stuck?** Do you want to see the solution to this challenge? Click here.

**Challenge #11**

- On a laptop, run a command that will display information about the battery status.

**Are you stuck?** Do you want to see the solution to this challenge? Click here.