HomeWork 1 by aimeric rouyer

ID : 414410902

Consign :

Setup Ubuntu Desktop and Ubuntu server

Execute a list of command in a terminal

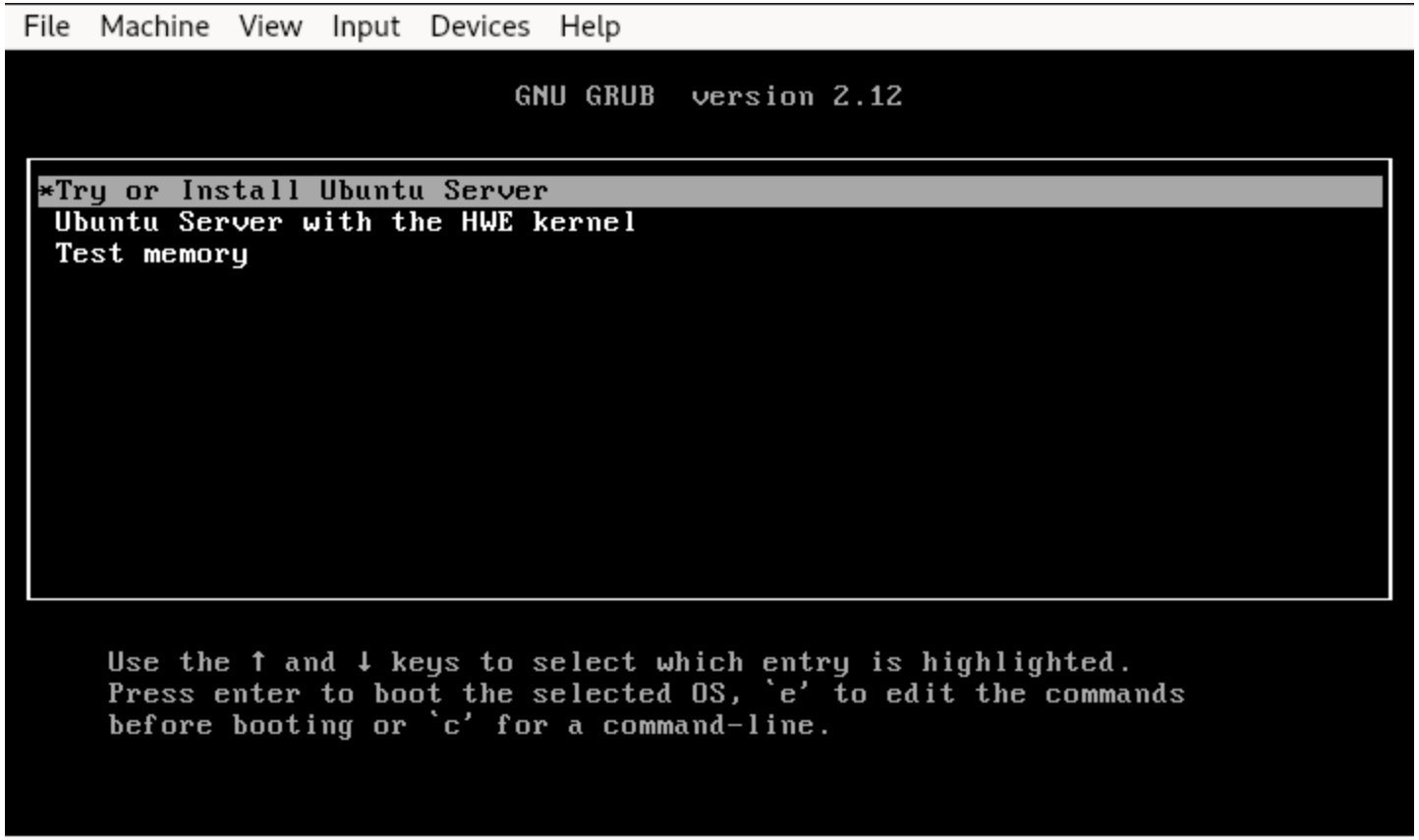
Show the result of thoes command

Explain what are their functions

The commands are : cd, ls, chown, rm, cat, ifconfig, vi, vim, nano, sudo, ps, kill, apt, wget, grep, source, service

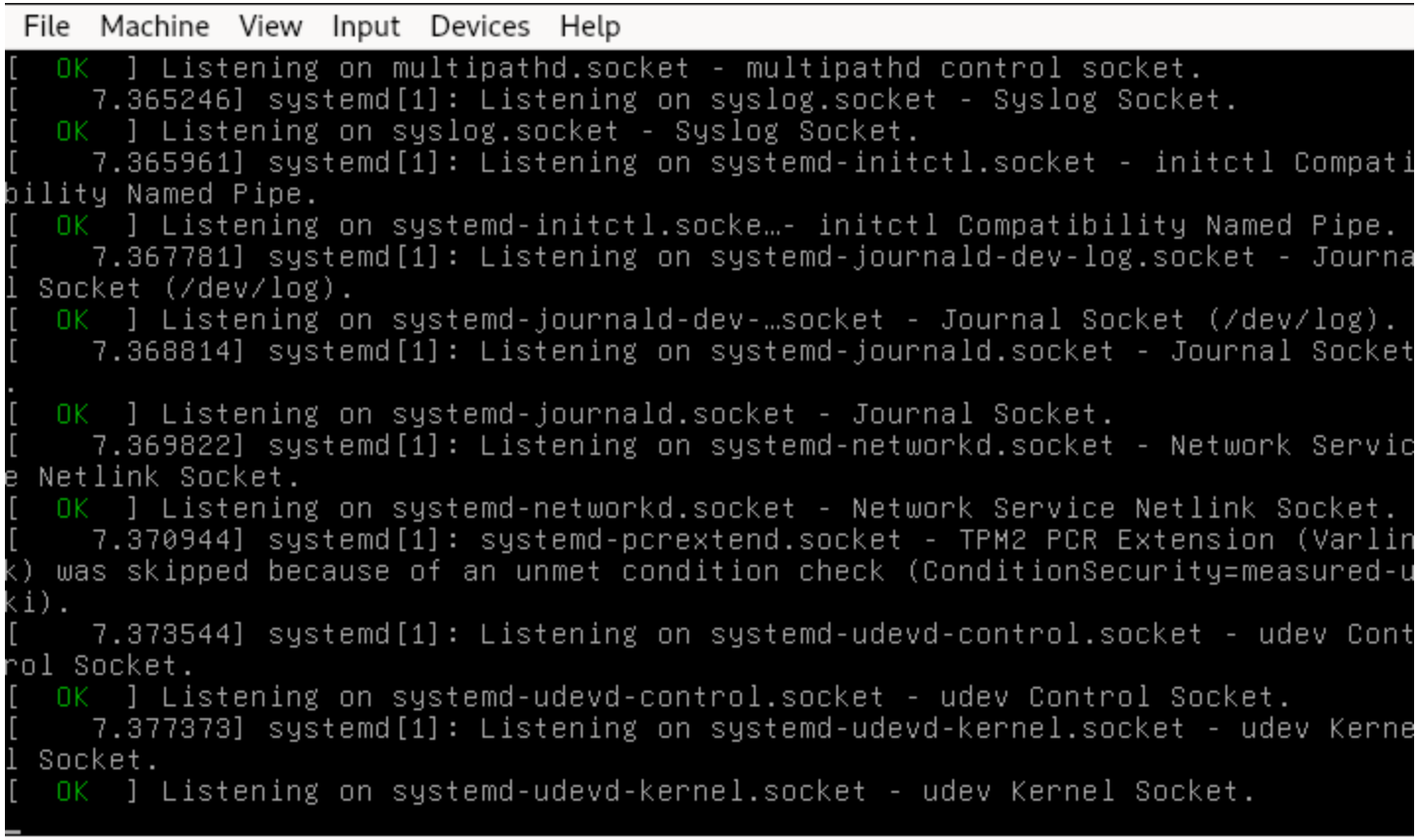
Part 1 setting up ubuntu Server

First we have to specify what we want to do with the iso (install ubuntu in our case)



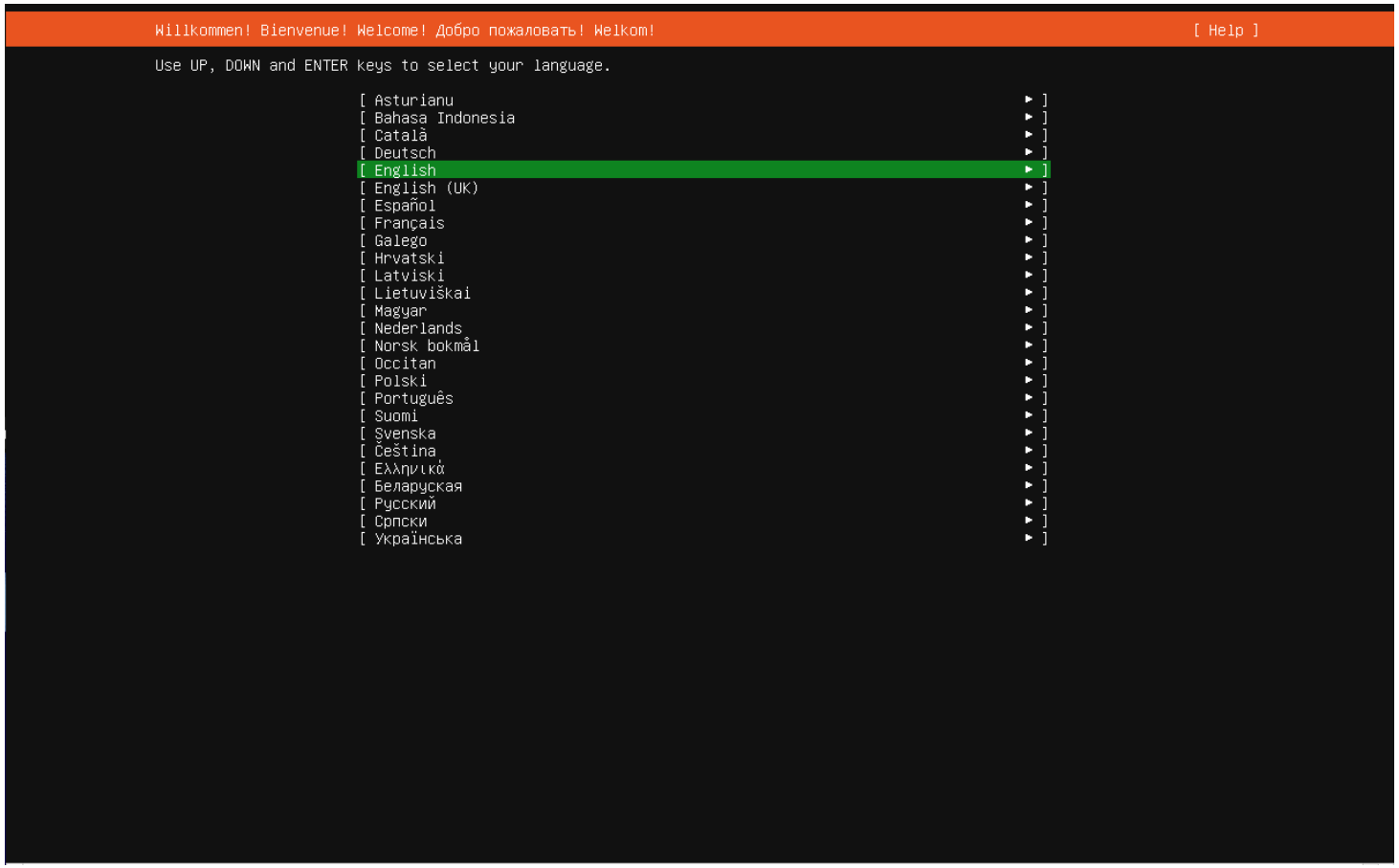
Part 1 setting up ubuntu Server

Some lines of code will be shown here you have to wait



Part 1 setting up ubuntu Server

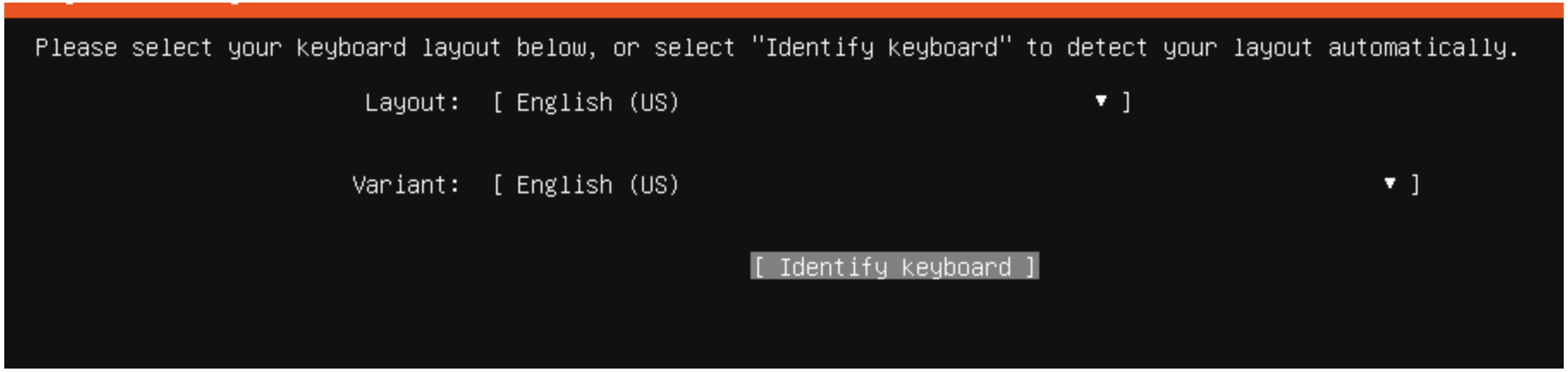
First we will select the language to do that use the arrow on our keyboard and then press enter when the green line is on the correct language

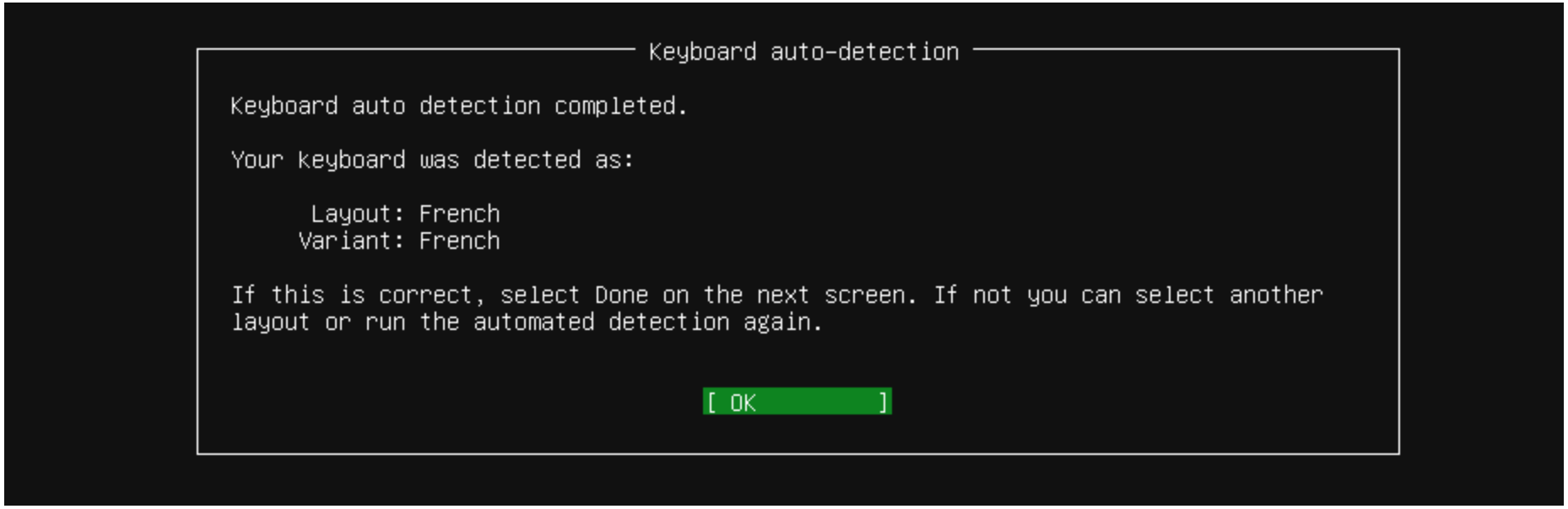


Part 1 setting up ubuntu Server

Now we will have to configure the keyboard i recommendd to sleect identify keyboard and press enter

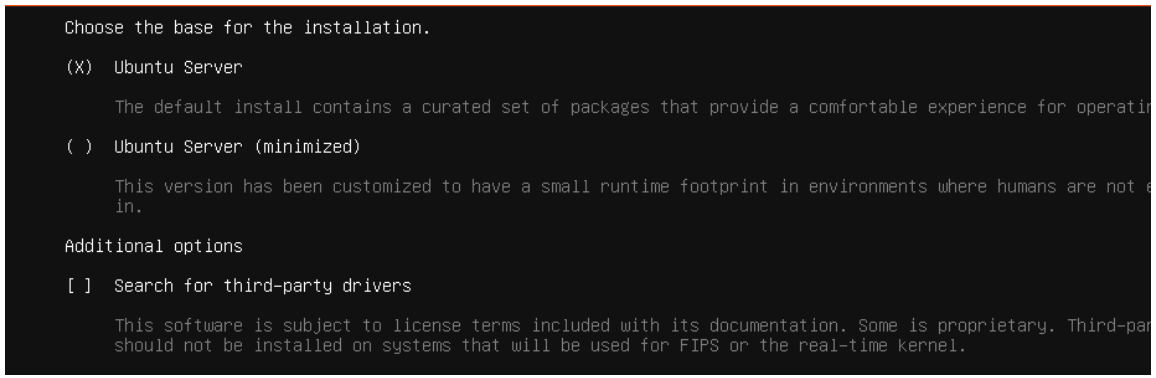
It will ask you to press key and question about wether or not key are present on your keyboard

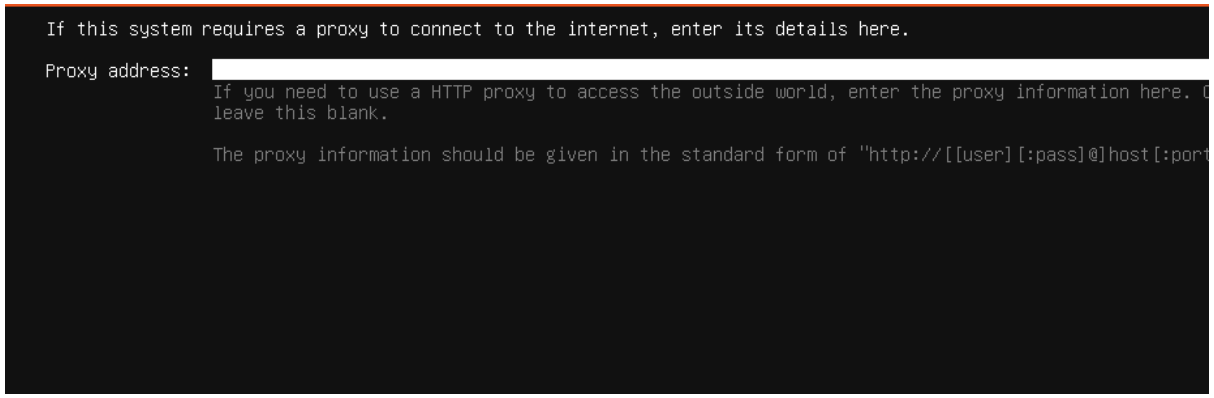


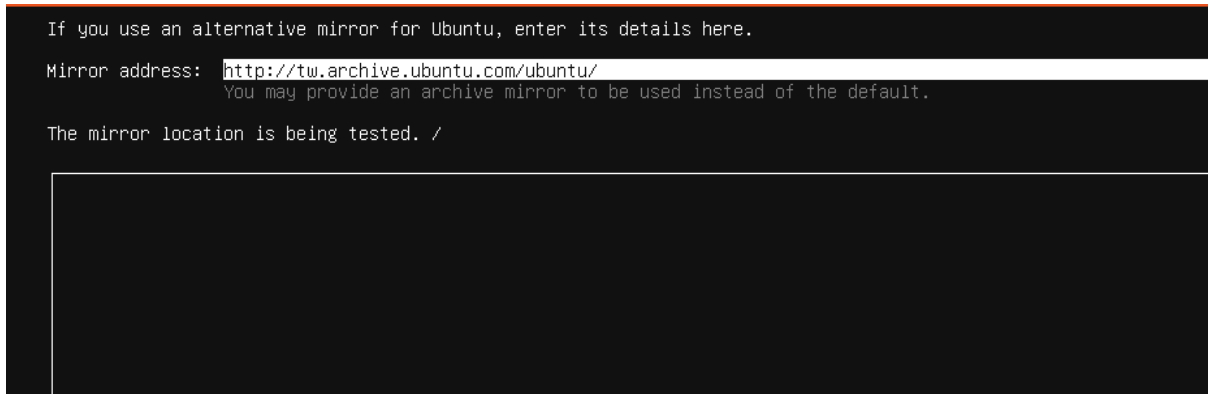


Part 1 setting up ubuntu Server

Here it will ask us a series of questions, for the default config like ours we don't have to modify this simply press enter

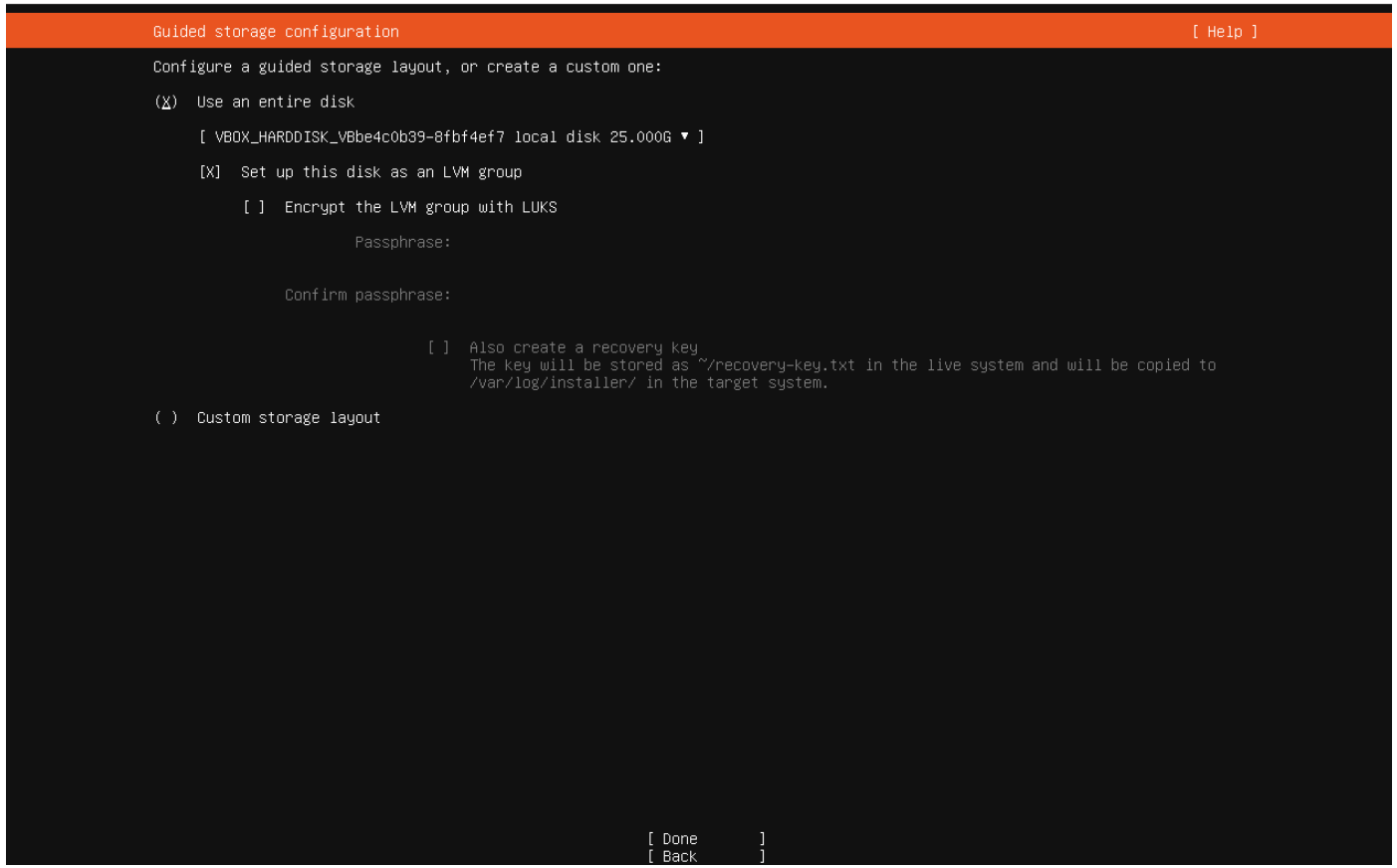






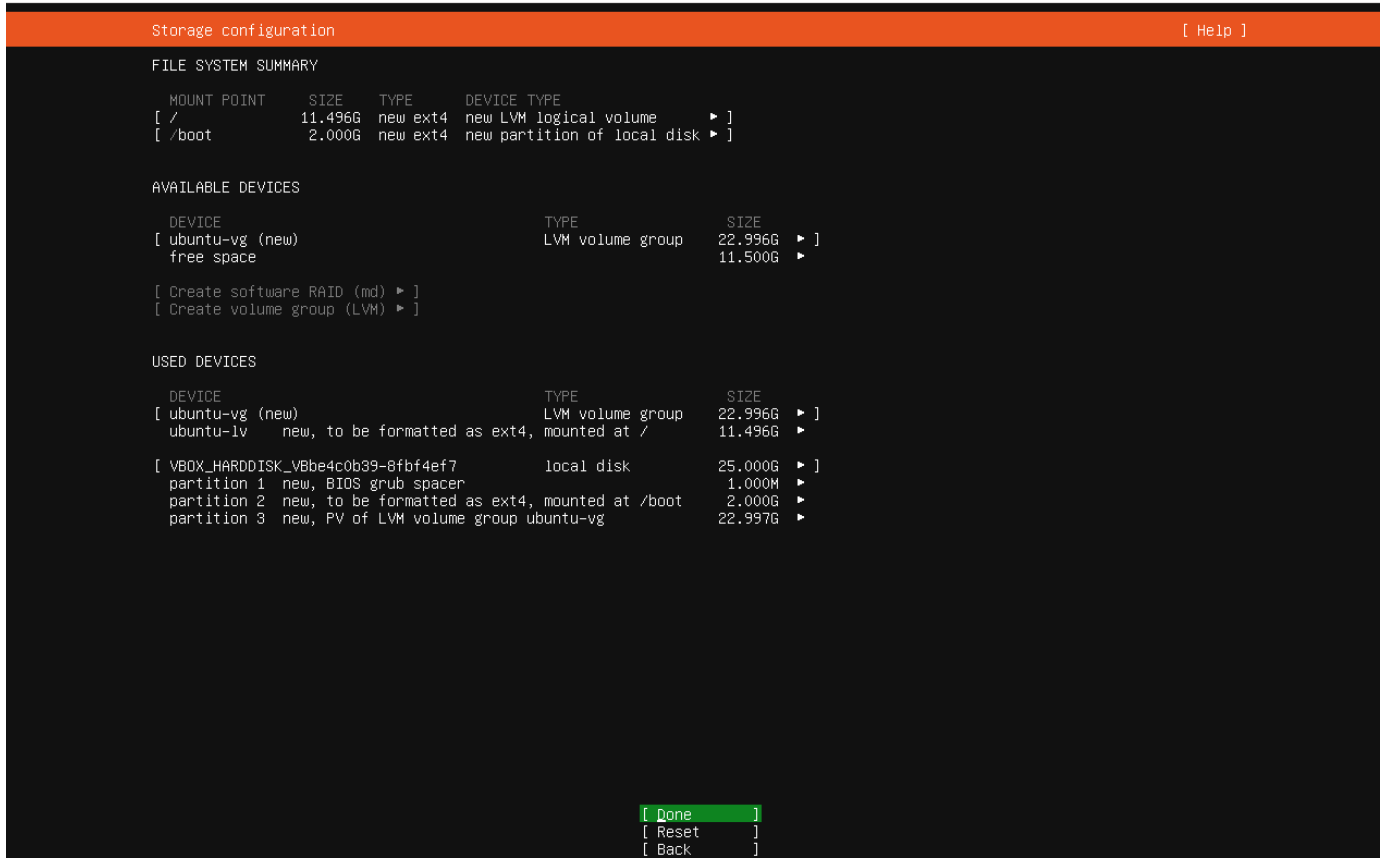
Part 1 setting up ubuntu Server

Here we have to specify the disk and how much of the disk we want to use, for a default config like ours we will just use the whole main disk



Part 1 setting up ubuntu Server

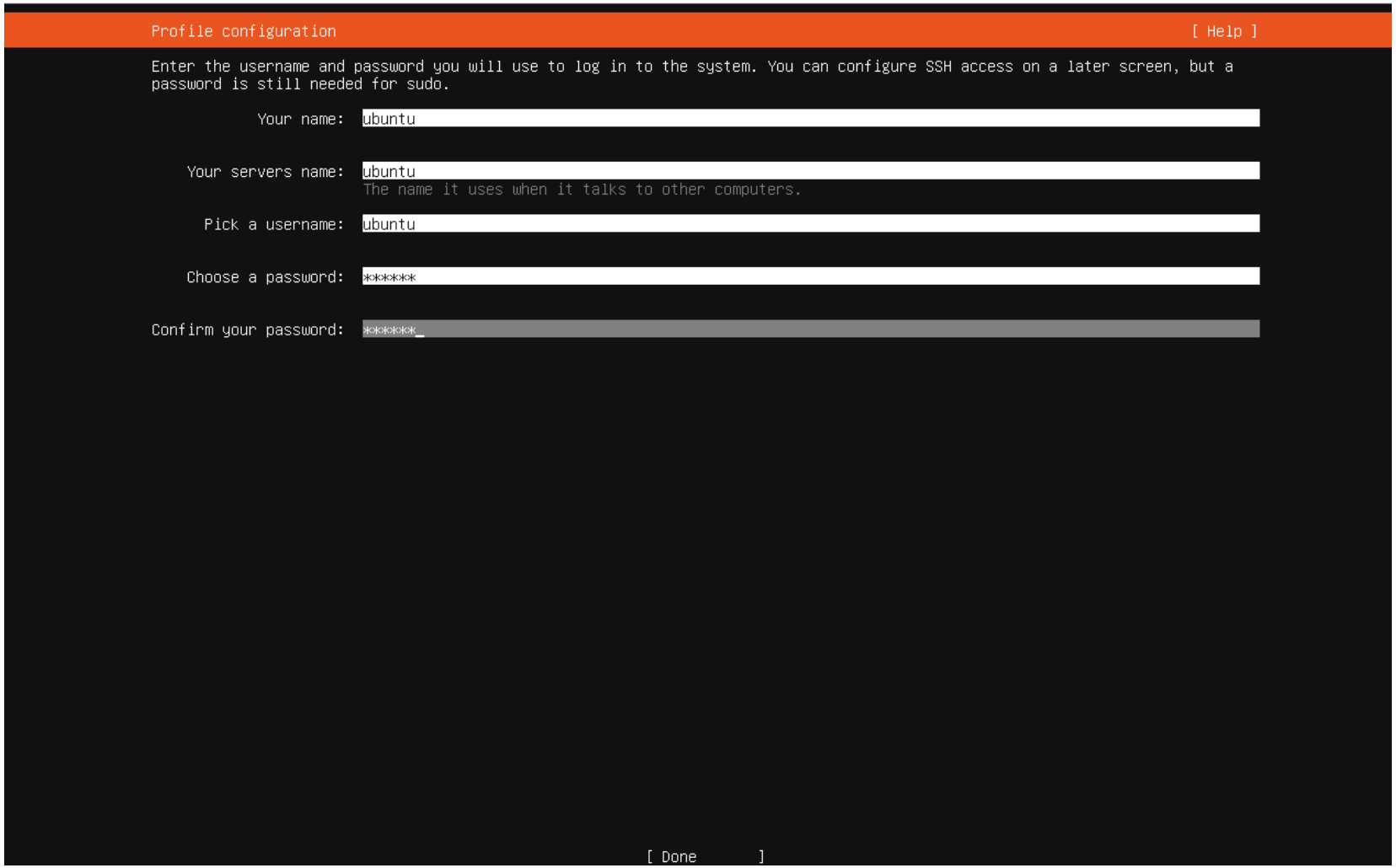
Here is a recap of every modification that will be applied to the disk



Part 1 setting up ubuntu Server

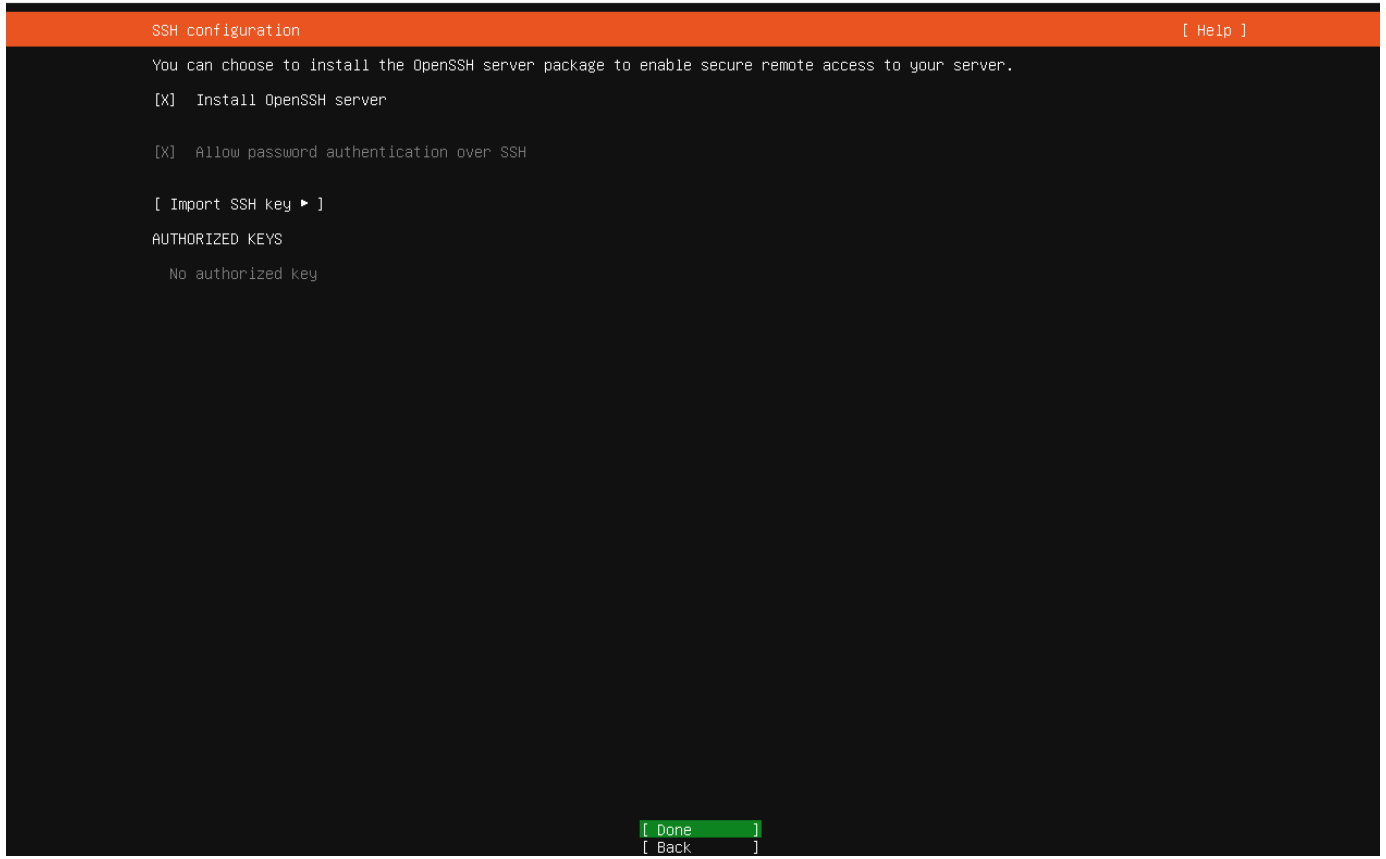
Here we enter our credential, the name of the account

The name of the computer seen from the network and the password of the account



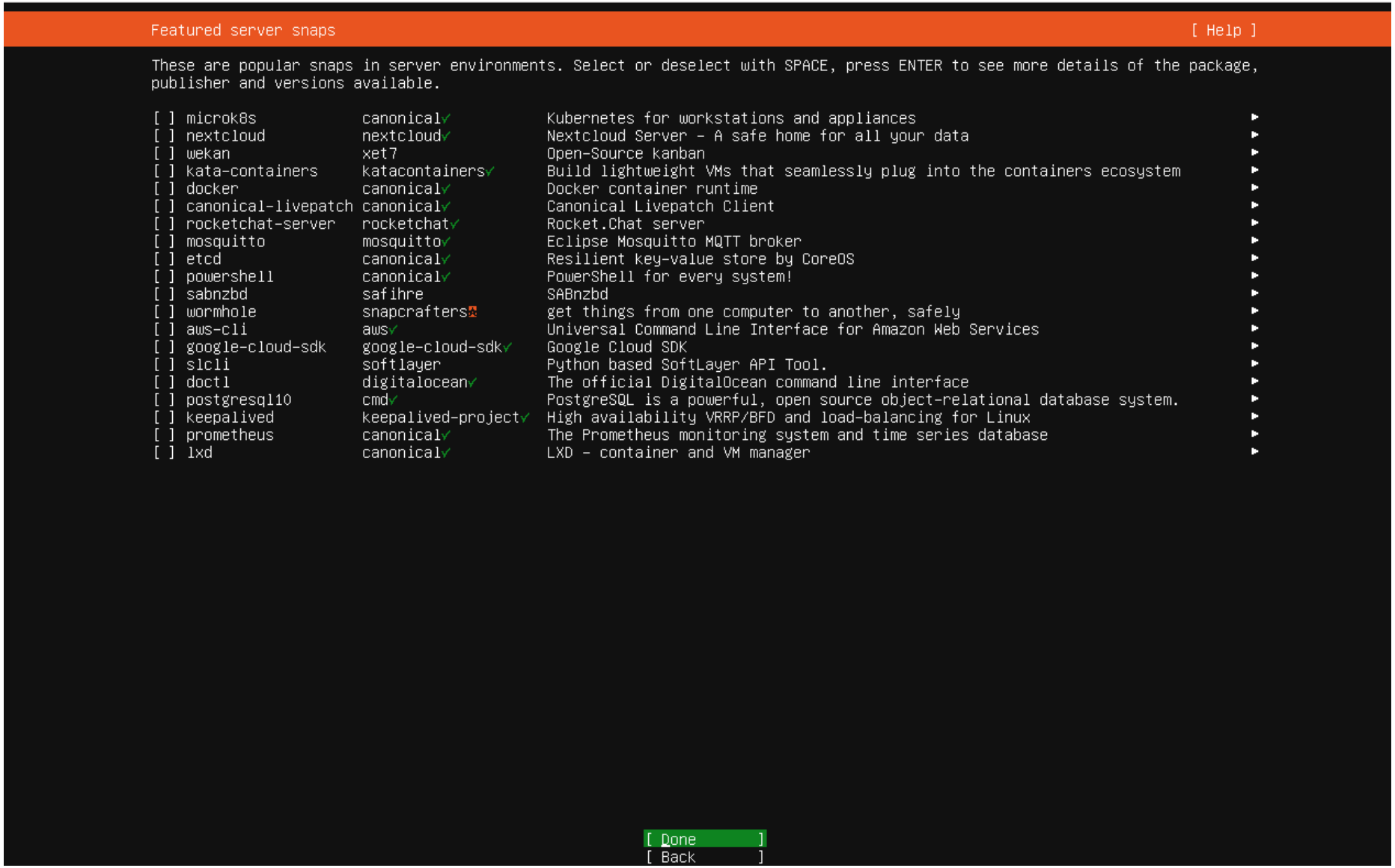
Part 1 setting up ubuntu Server

If we want to be able to access to our server remotely without a screen here we have to check install openSSH server



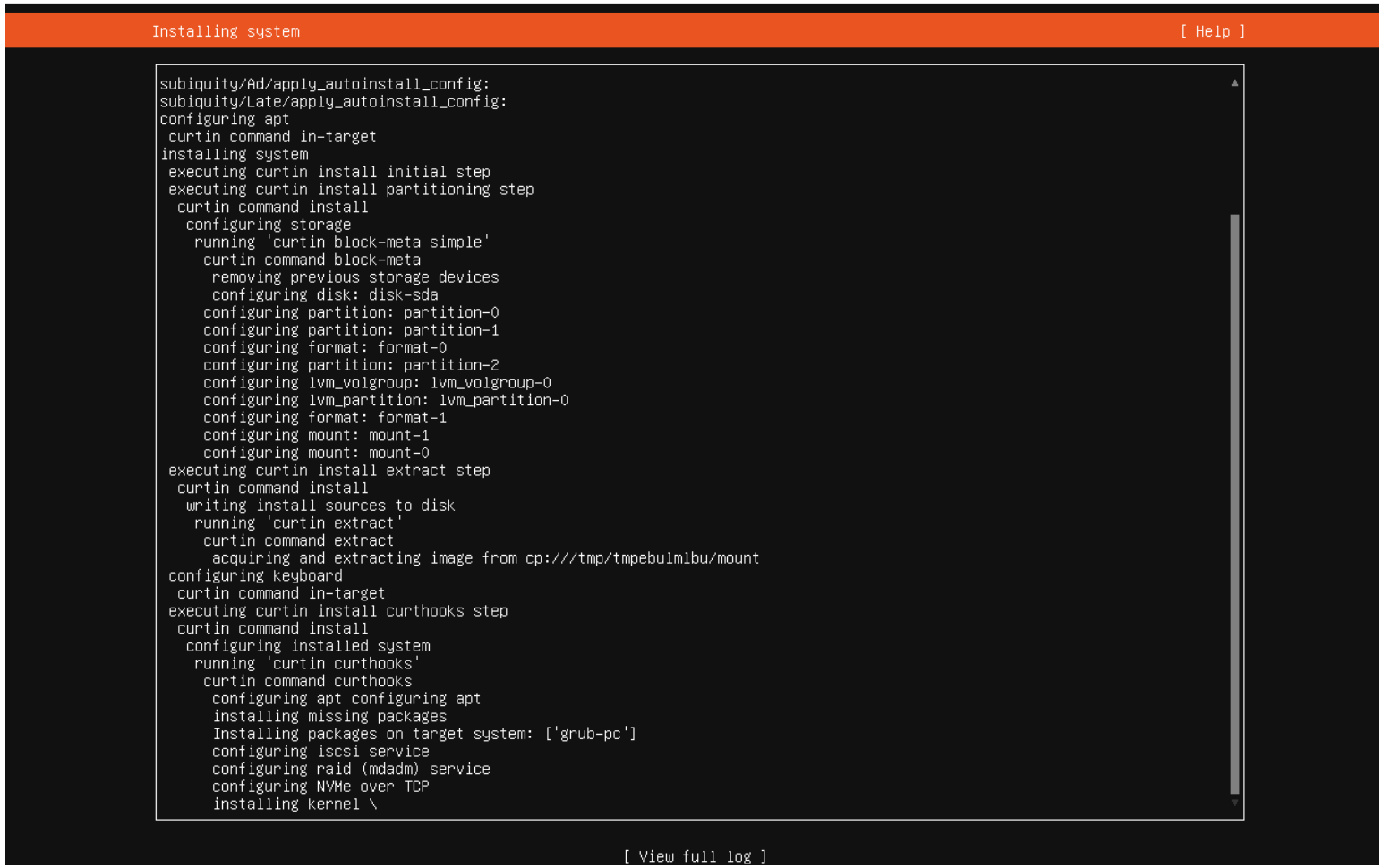
Part 1 setting up ubuntu Server

Here we select additional module if we need them



Part 1 setting up ubuntu Server

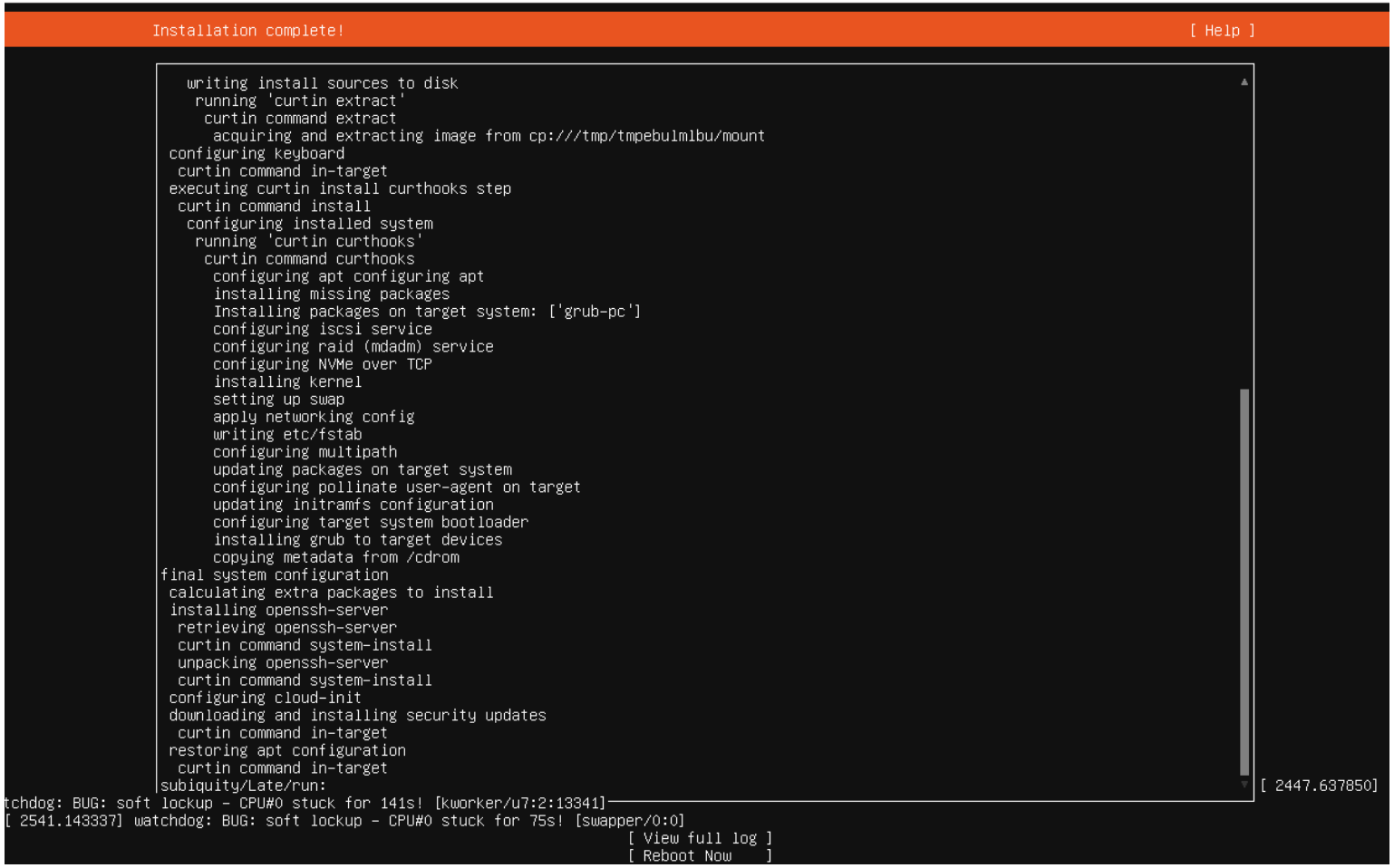
We will then arrive here, and from here we only have to wait until the installation is complete



Part 1 setting up ubuntu Server

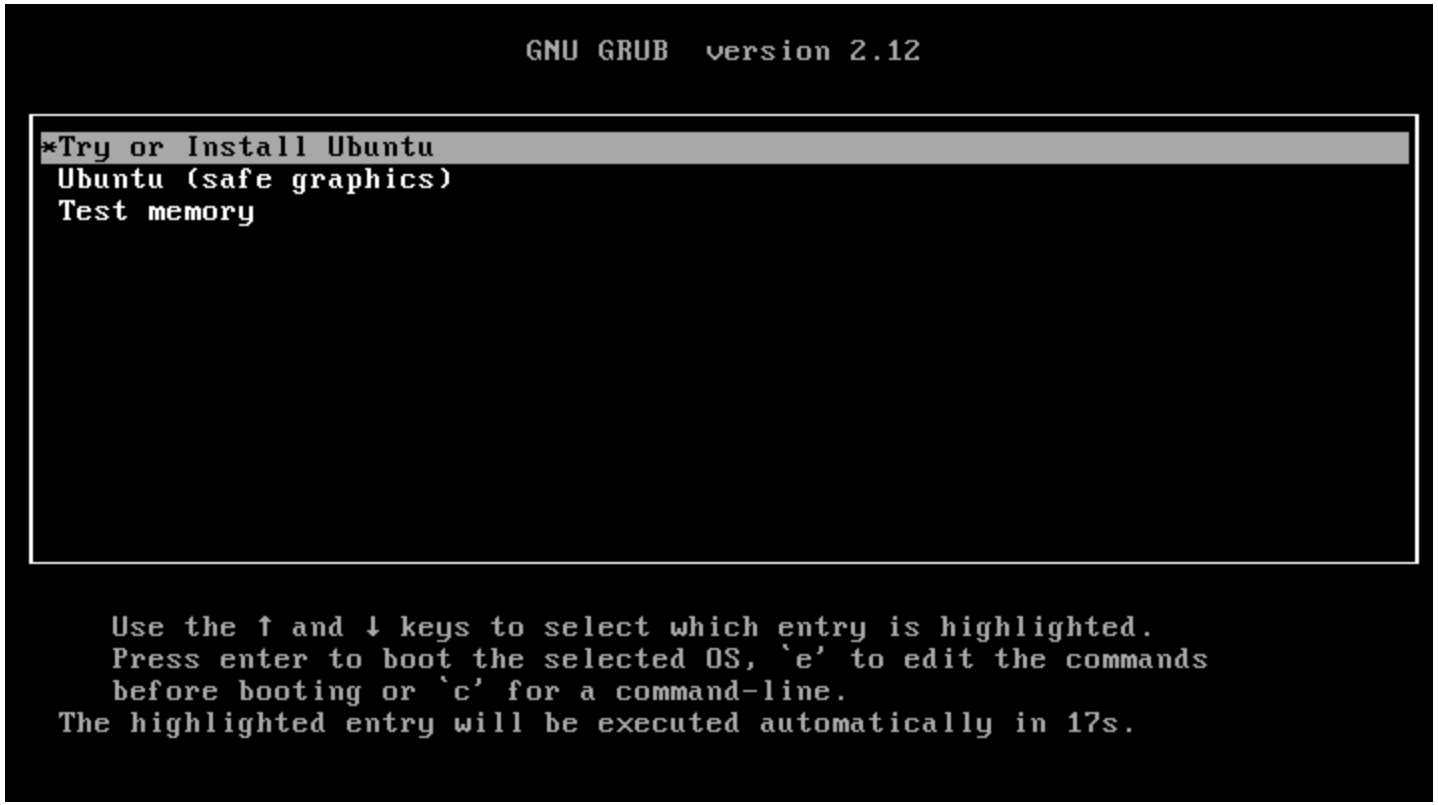
Now you just have to select reboot now on the bottom, the coputer will restart and automatically boot on ubuntu server

You will just have to enter your username and password



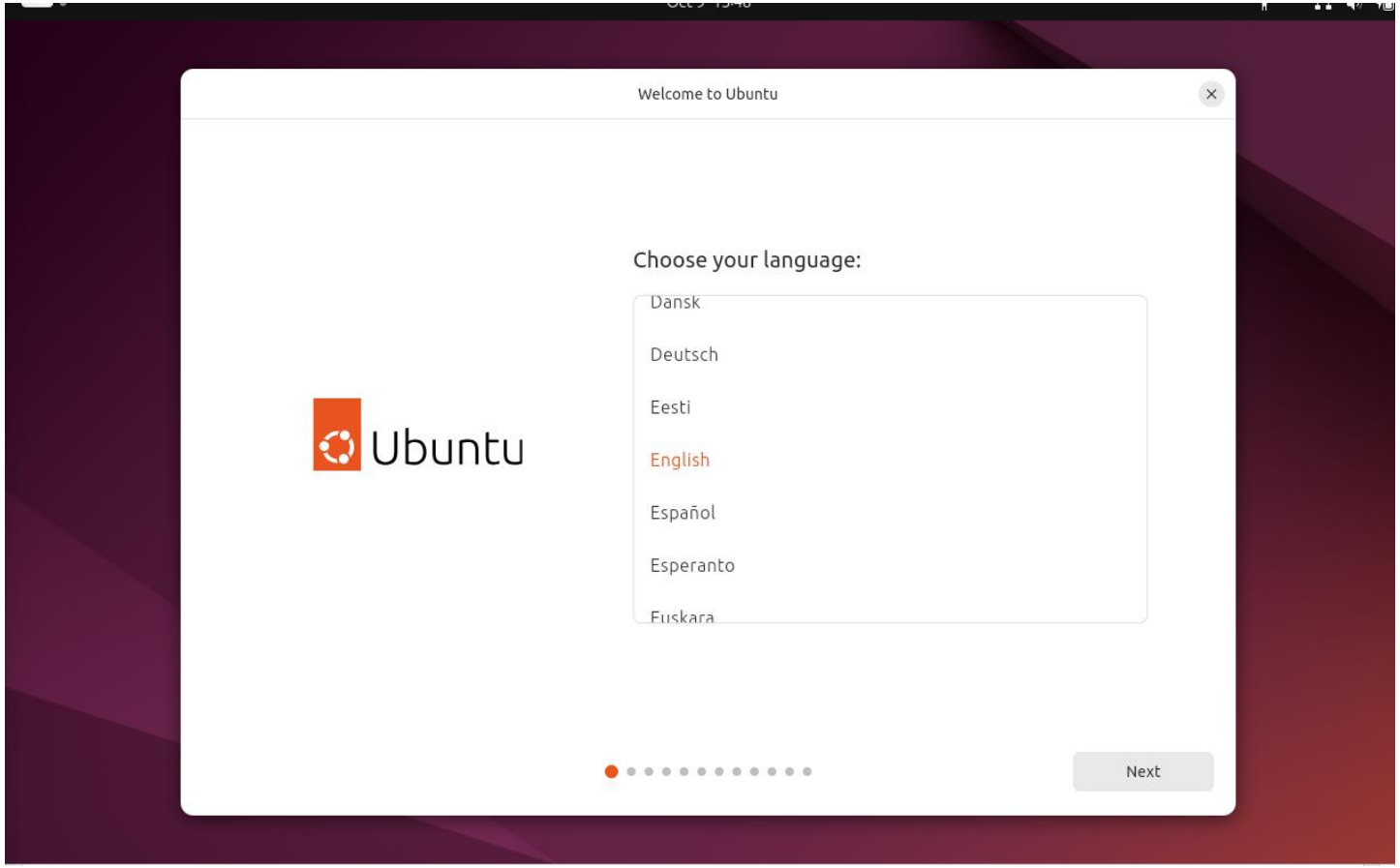
Part 2 setting up ubuntu Desktop

When we boot on ubuntu we arrive to this screen if we don't touch anything it will select Try or Install Ubuntu (what we want) by default



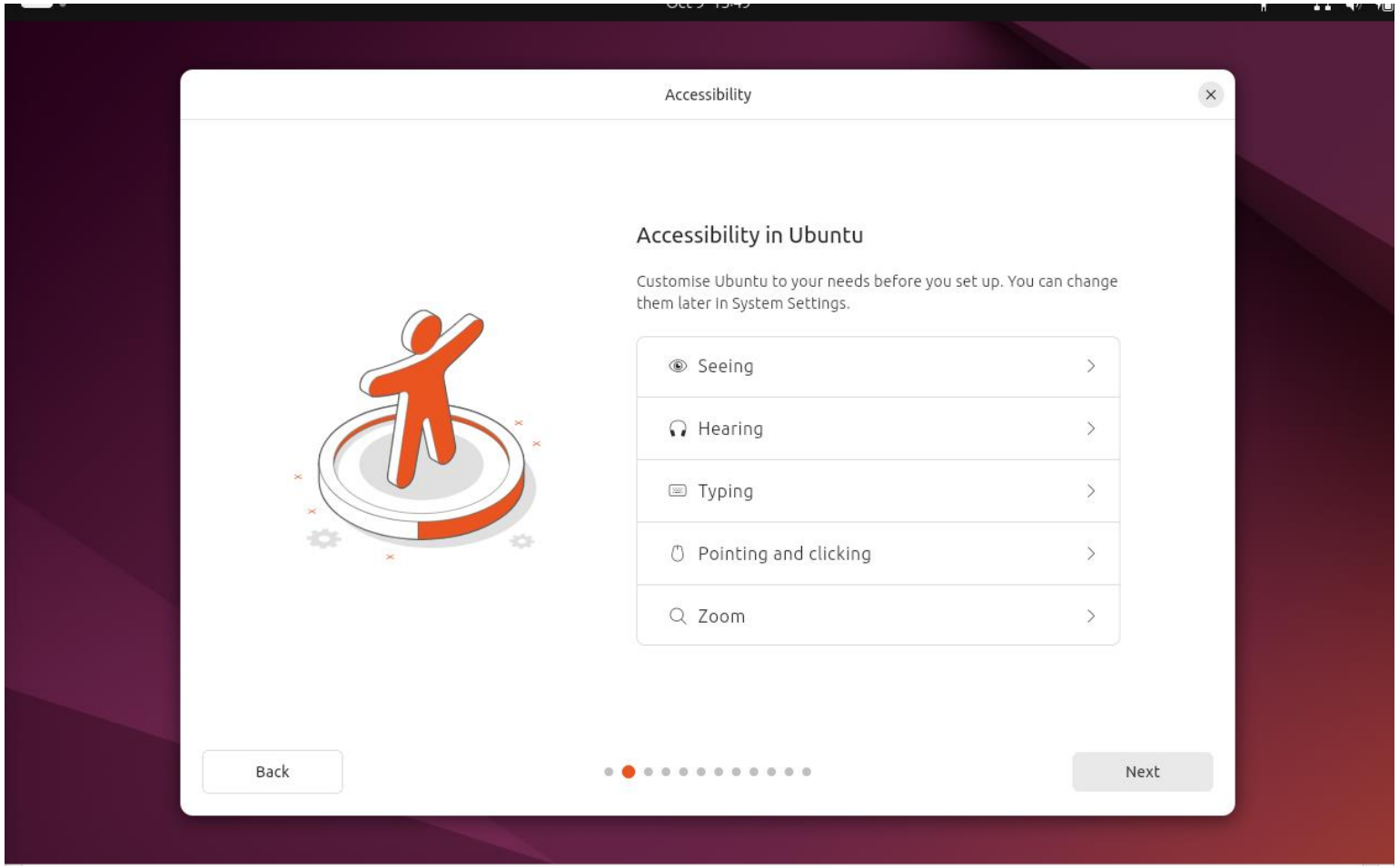
Part 2 setting up ubuntu Desktop

First we will select the language (since it is a graphic interface we can use the mouse if we want)



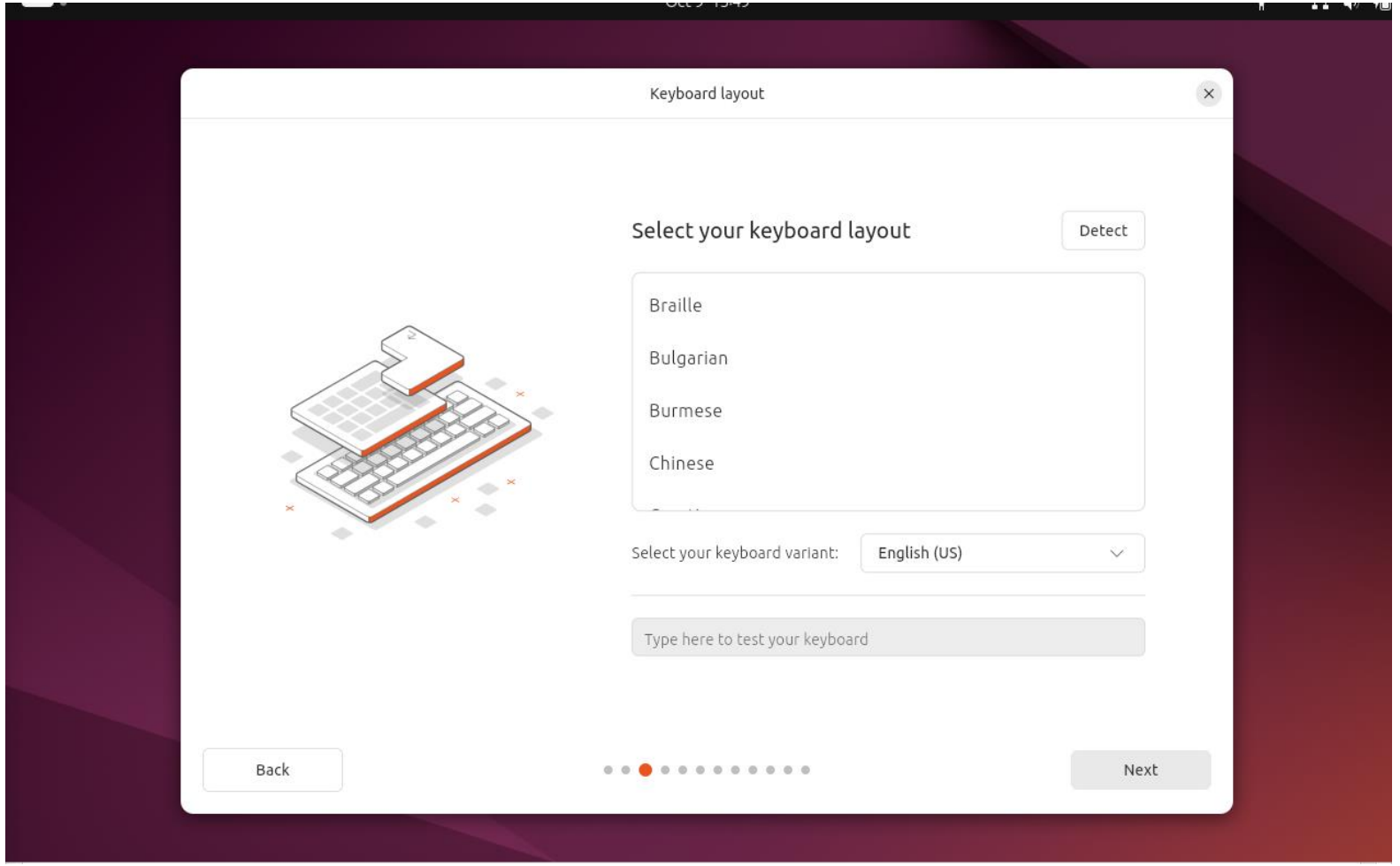
Part 2 setting up ubuntu Desktop

Here we will leave it by default since we don't have accessibility issues



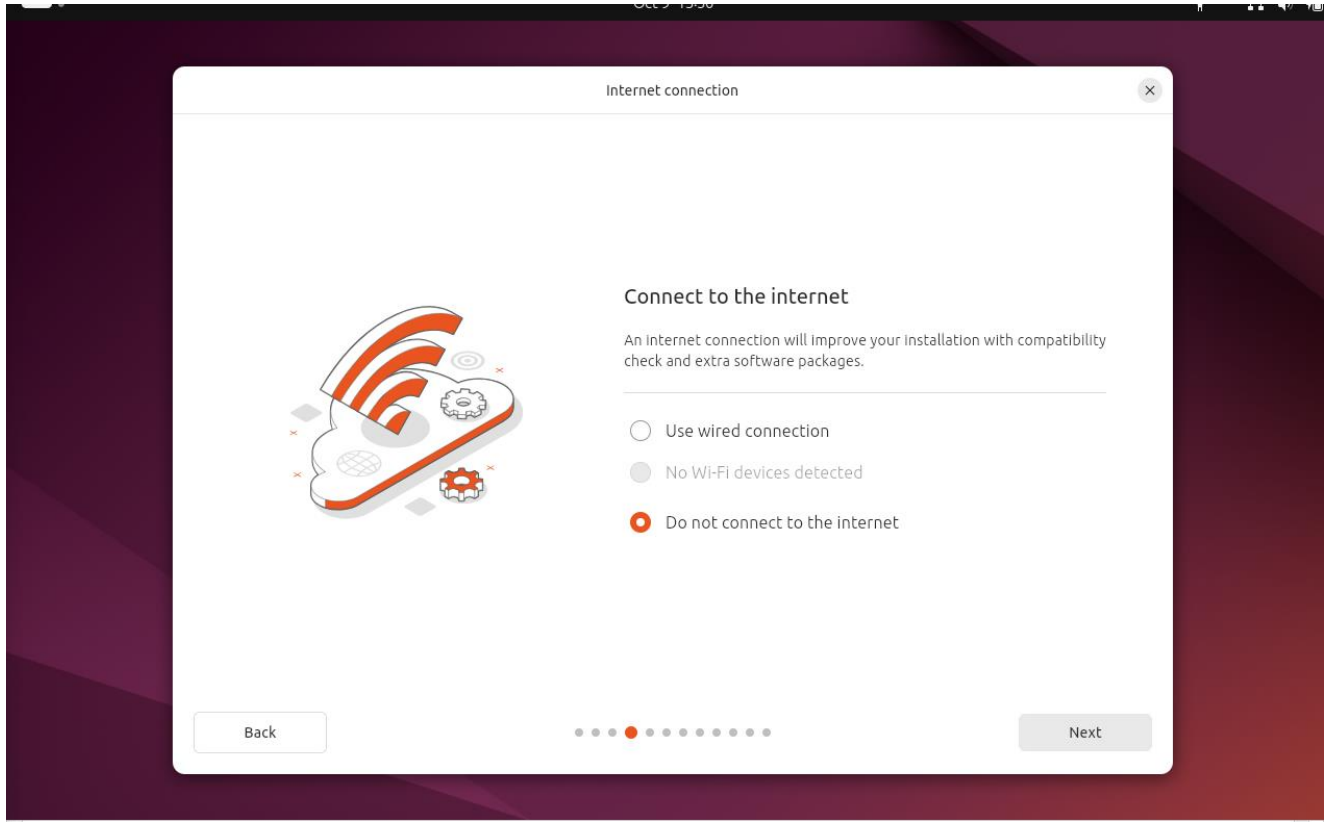
Part 2 setting up ubuntu Desktop

Here we will select the keyboard (i will advise you to use the detect function)



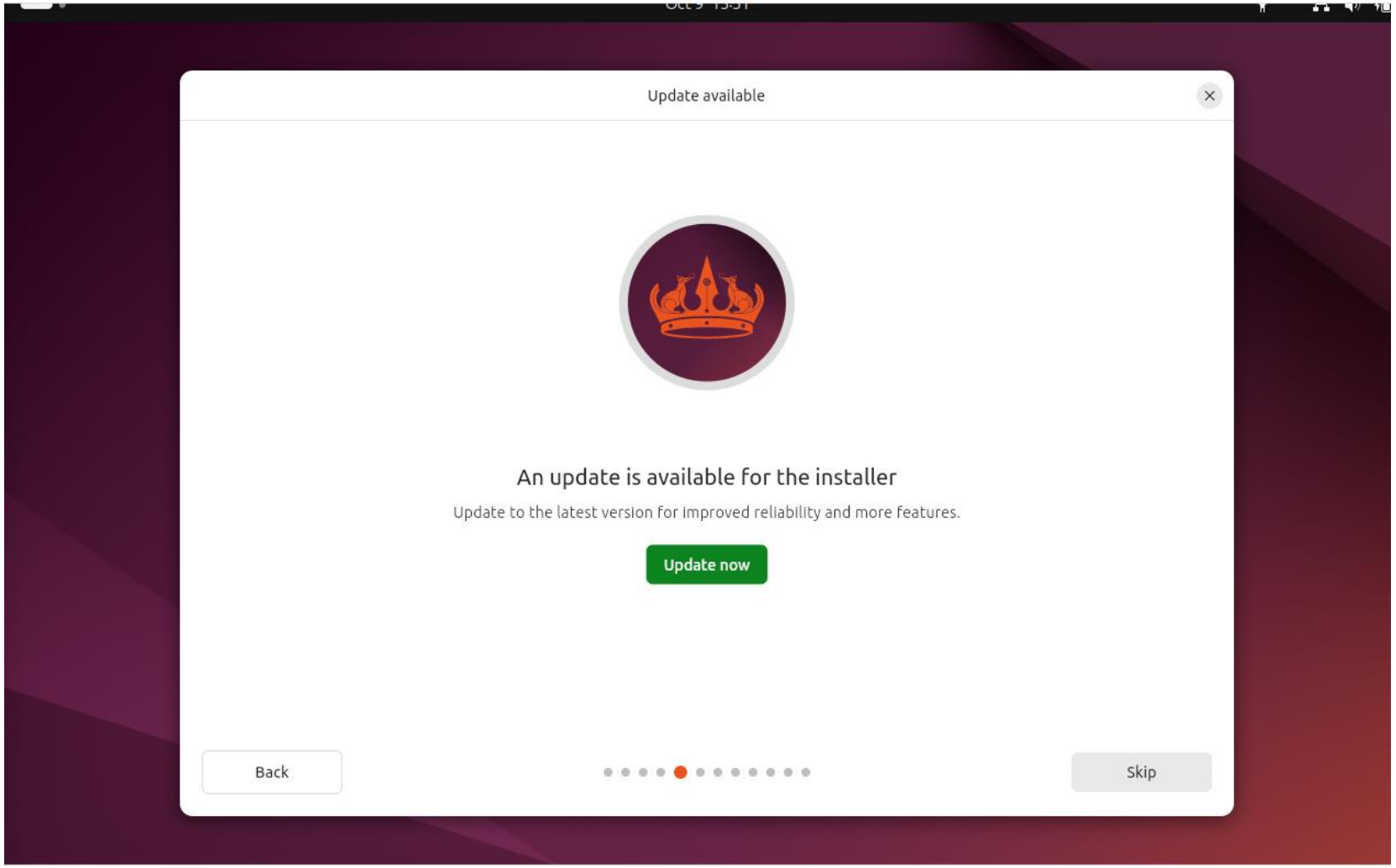
Part 2 setting up ubuntu Desktop

We setup the internet connexion (to download missing driver for example)



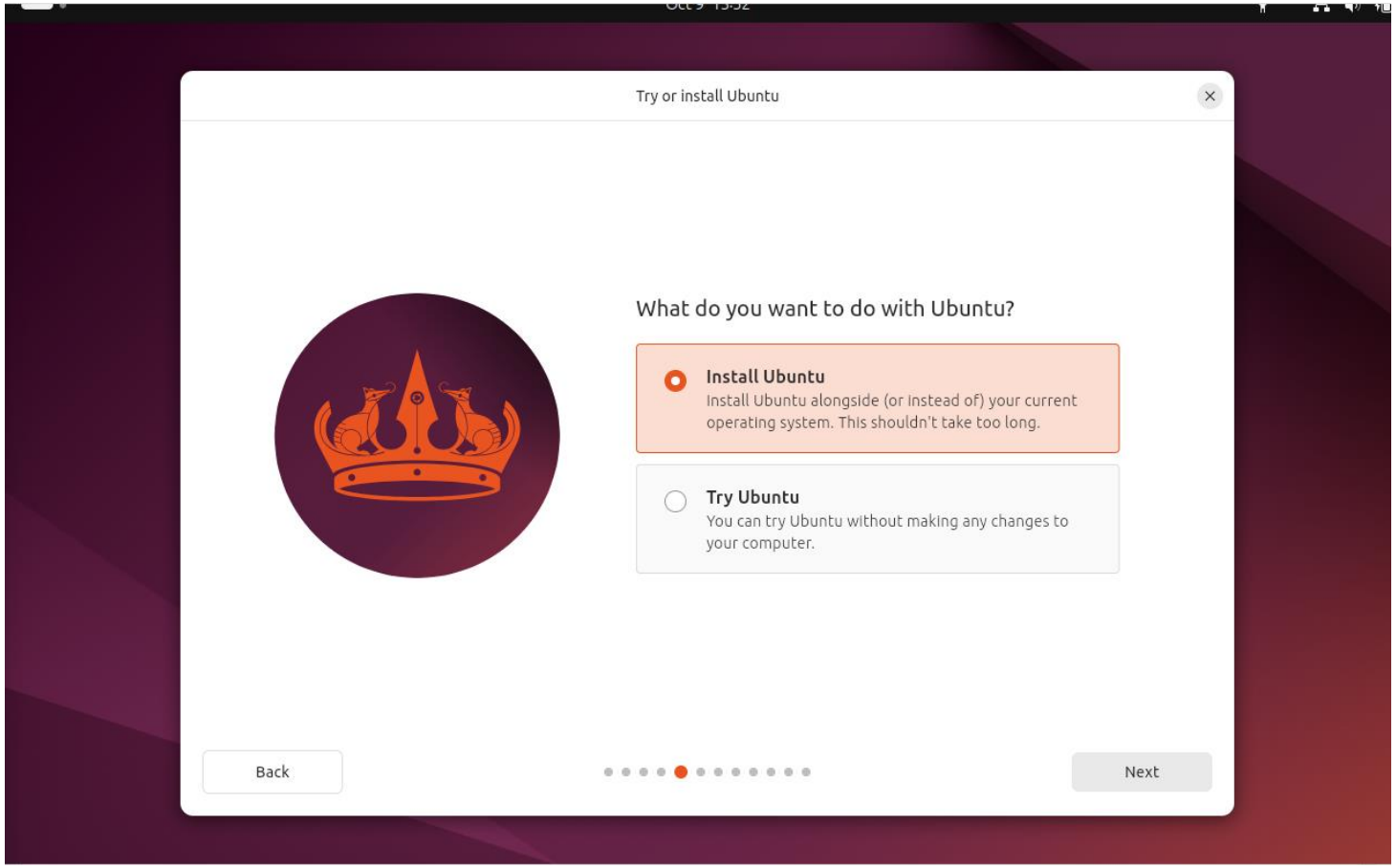
Part 2 setting up ubuntu Desktop

You will install the update in order to get a better compatibility, more secure and more stable version of ubuntu



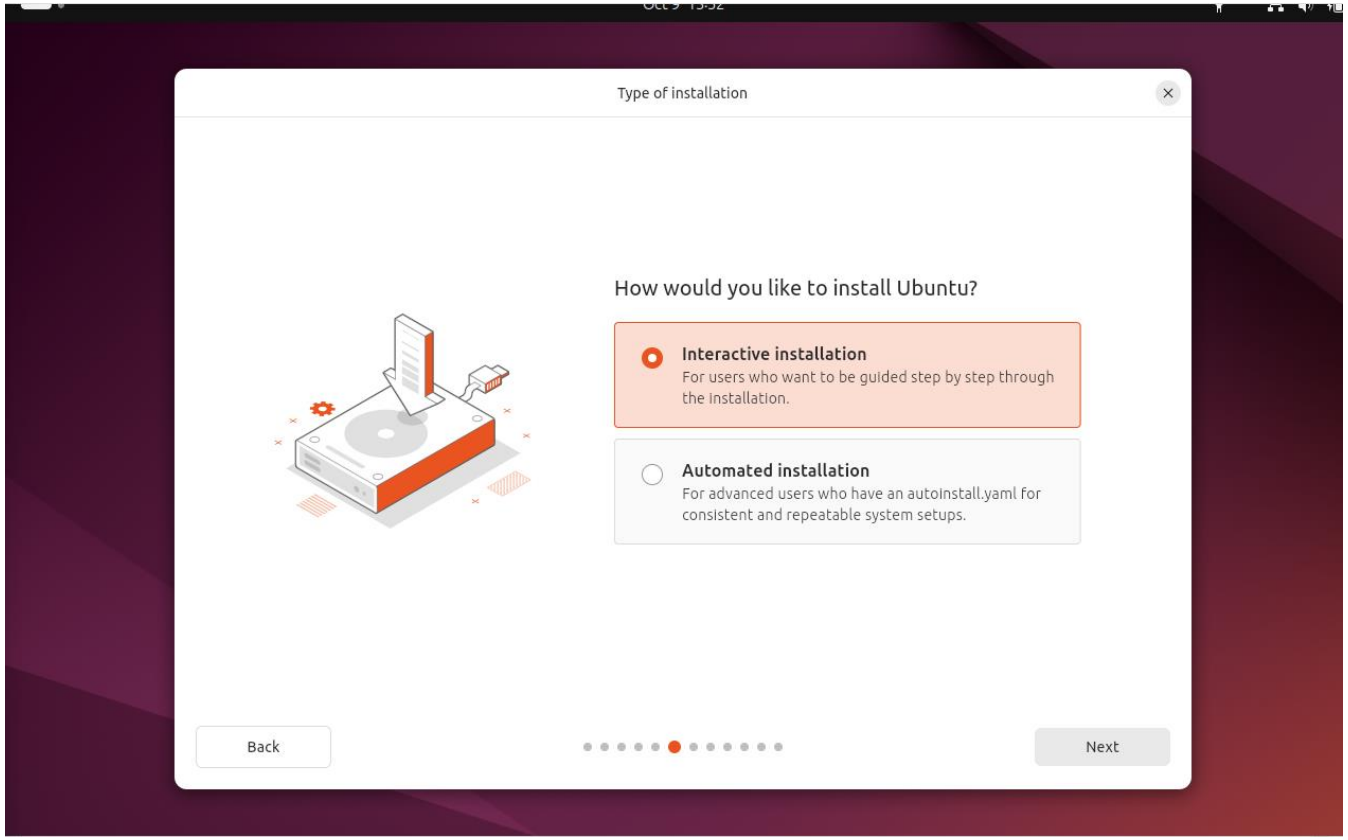
Part 2 setting up ubuntu Desktop

Here we will select install so the next time we boot our computer we don't have to do all of that all over again



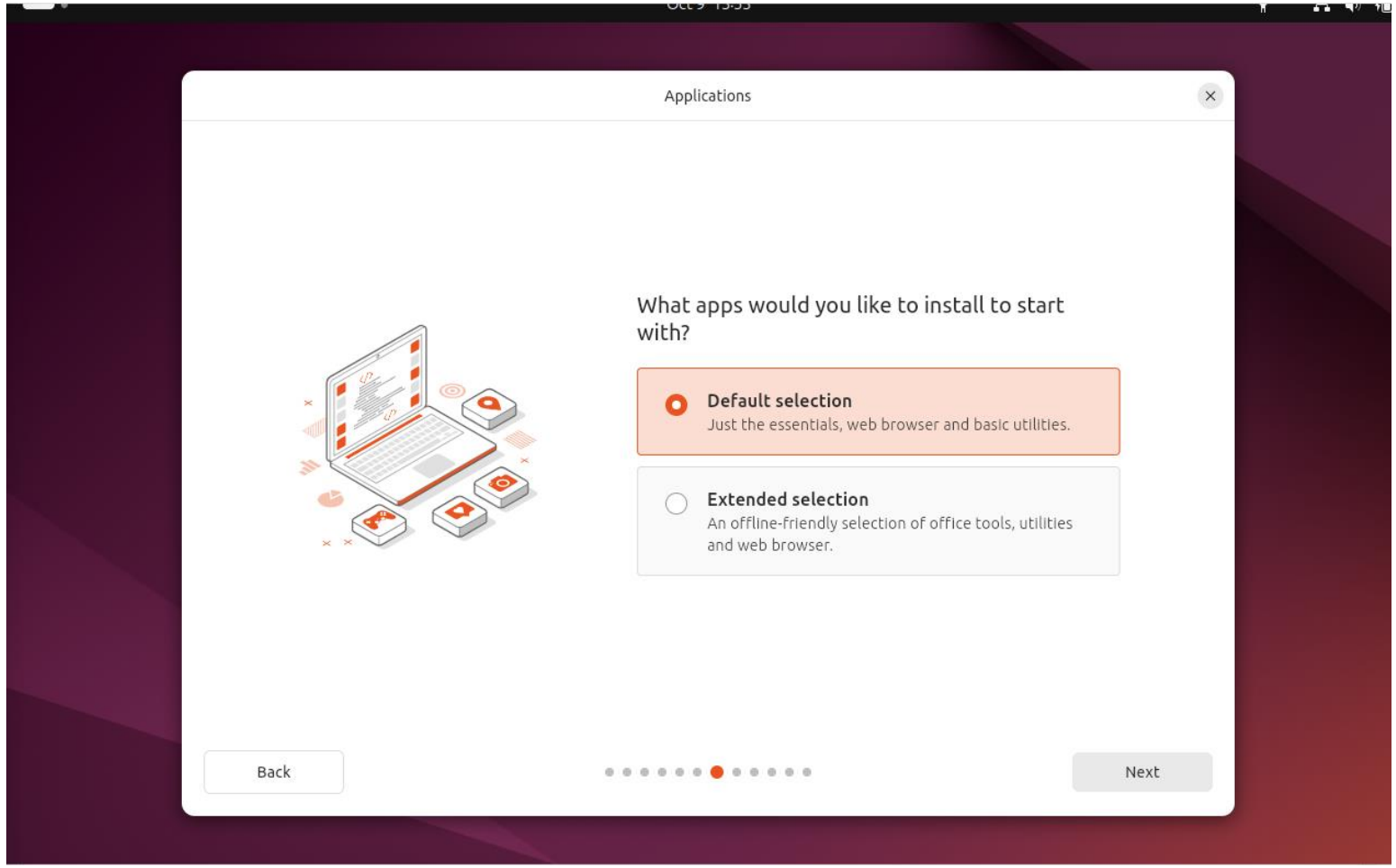
Part 2 setting up ubuntu Desktop

We will select interactive installation as it is easier and we don't need to partition our disk



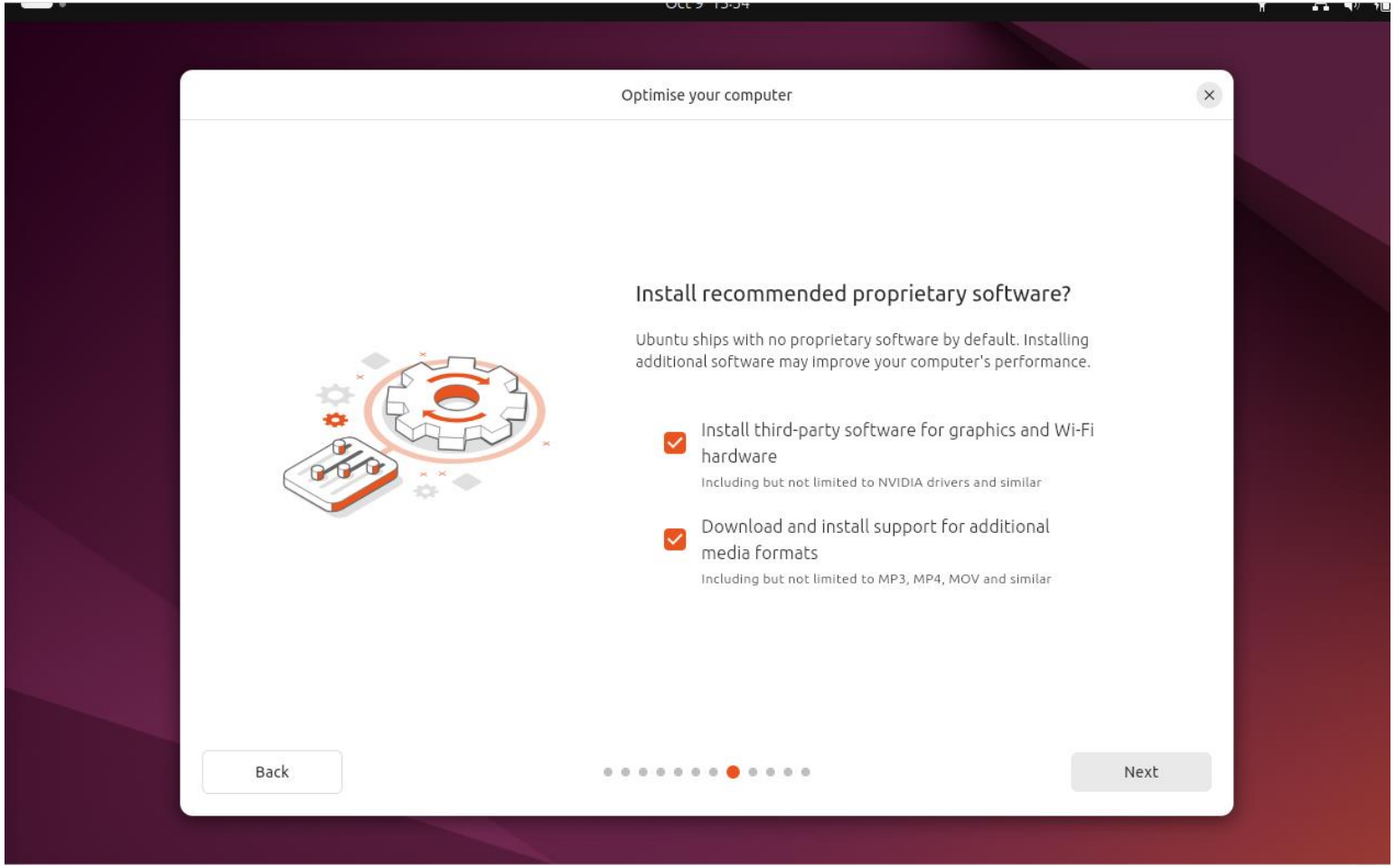
Part 2 setting up ubuntu Desktop

Here we also select default as we only need ubuntu desktop for testing we could still add more app later



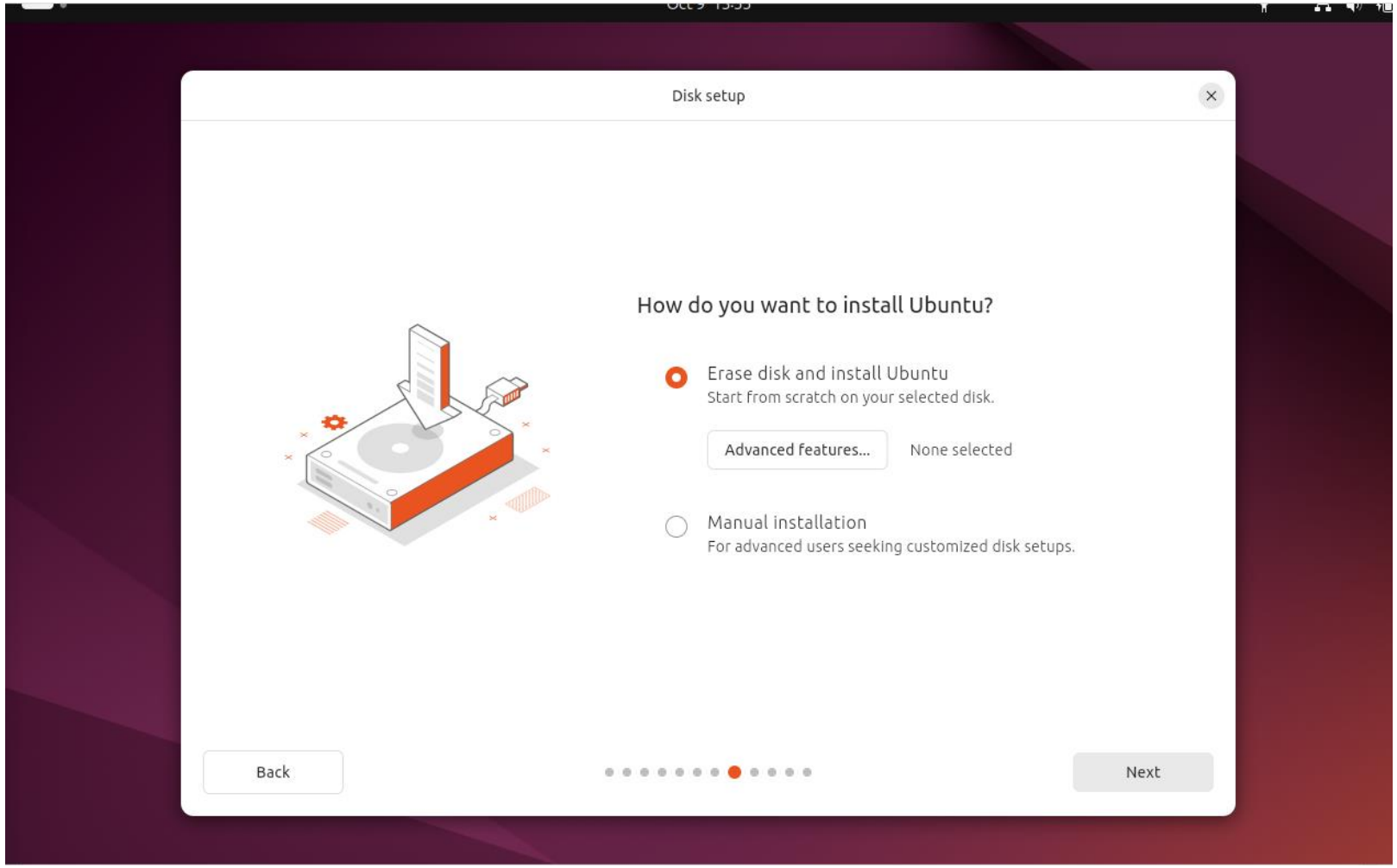
Part 2 setting up ubuntu Desktop

By default thoes two element are not checked i recommend you to check them



Part 2 setting up ubuntu Desktop

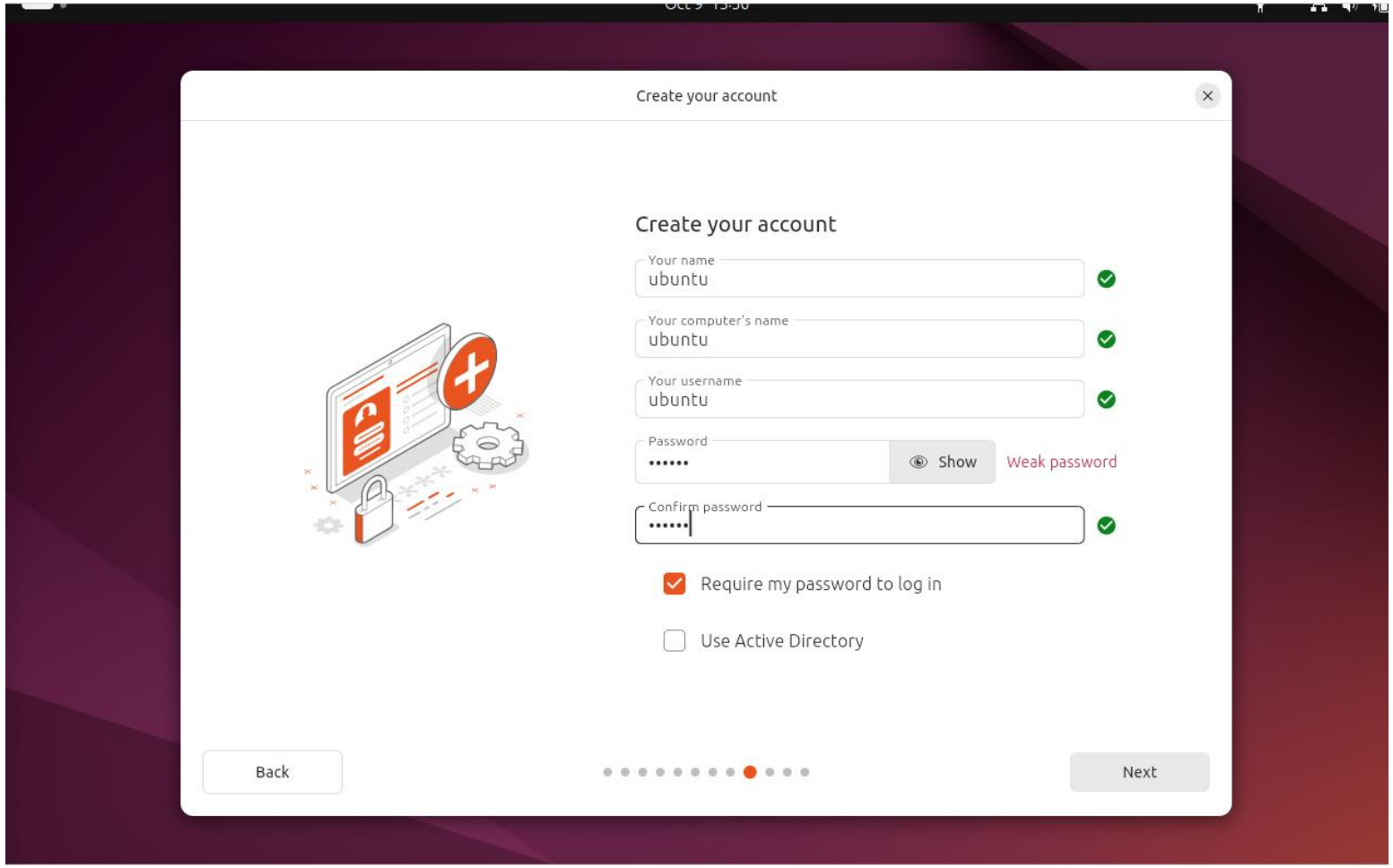
Same as before for simplicity we will use the whole disk



Part 2 setting up ubuntu Desktop

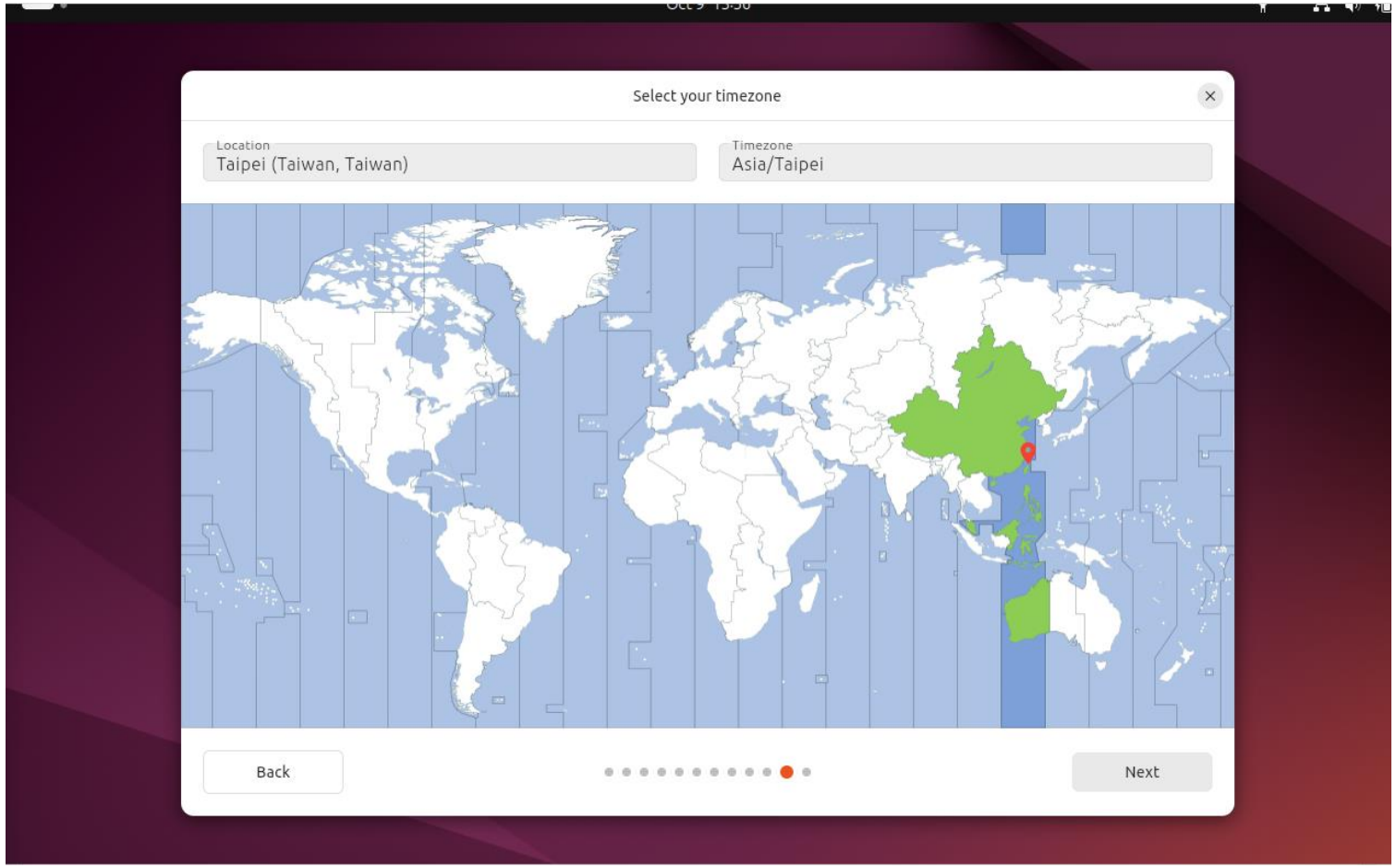
Here we enter our credential, the name of the account

The name of the computer seen from the network and the password of the account



Part 2 setting up ubuntu Desktop

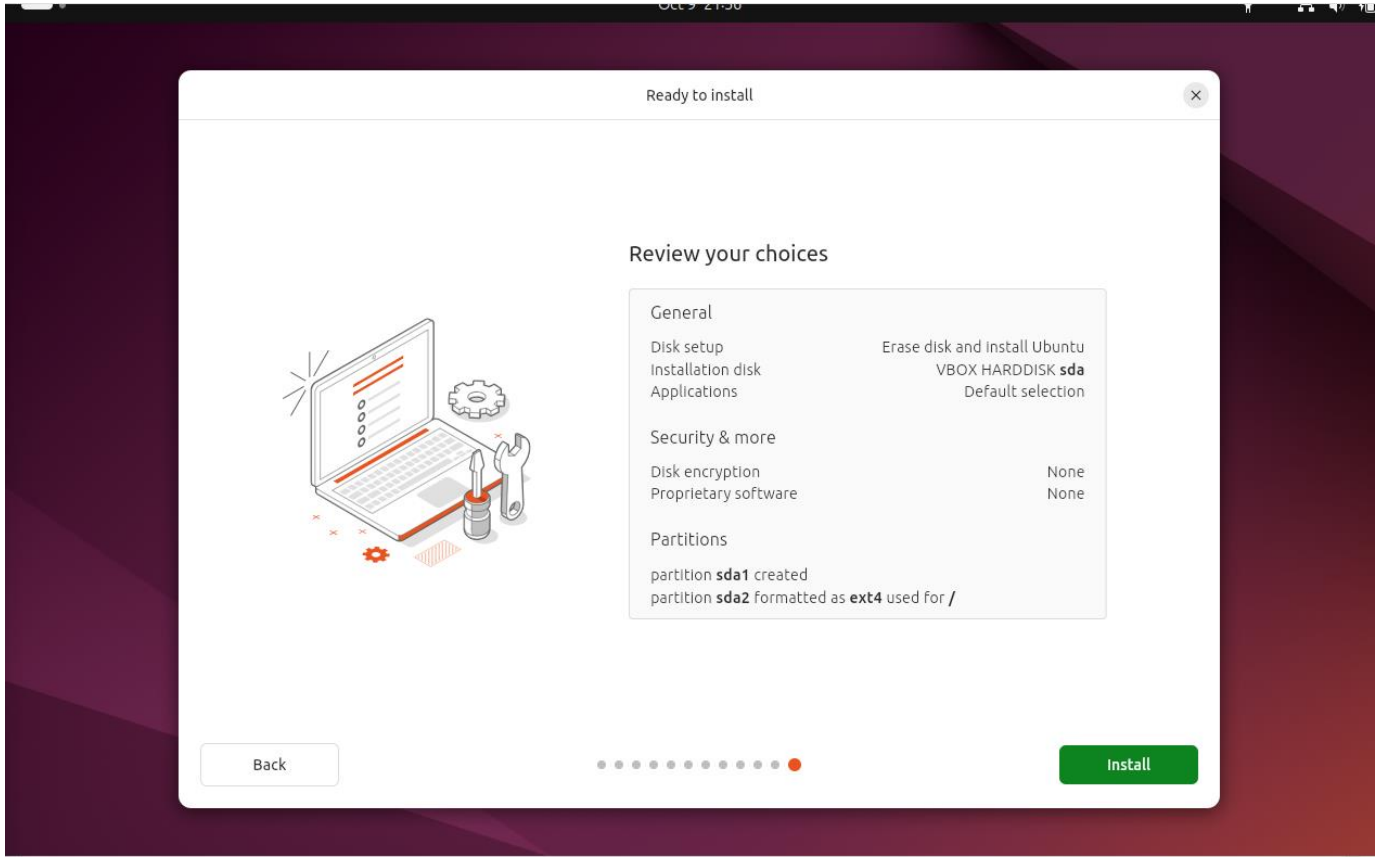
Here we select the time zone (use sometime for security) so the computer automatically know what time it is



Part 2 setting up ubuntu Desktop

Now click on install and it will proceed with the instalation

Once it is done the computer will restart and you iwll be able to use Ubuntu Desktop

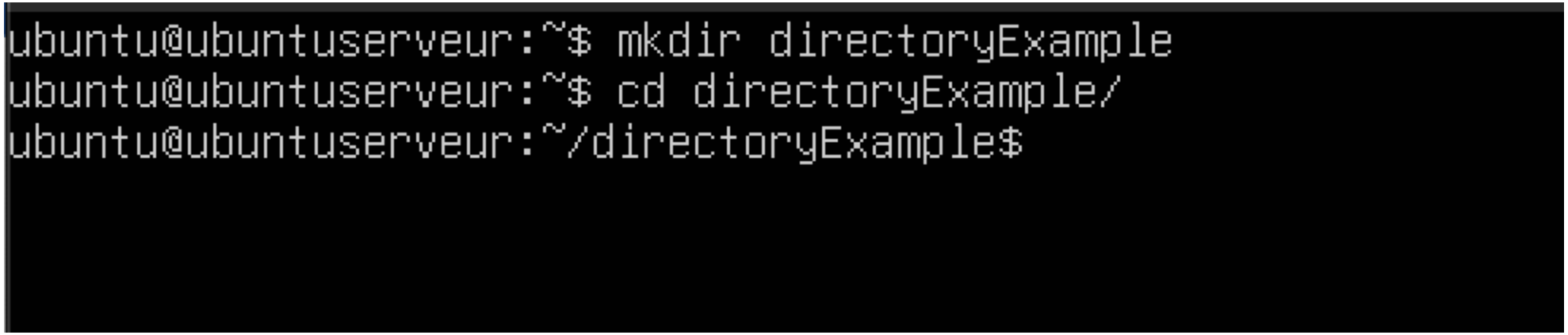


The command CD

Used to move between folder

Change the current directory

For example i was in the home (represented by ~) and i moved to directoryExample

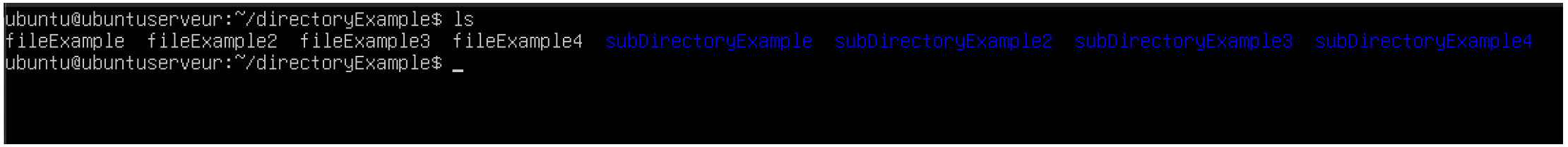


Commande : ls

Show files and folder in the current folder

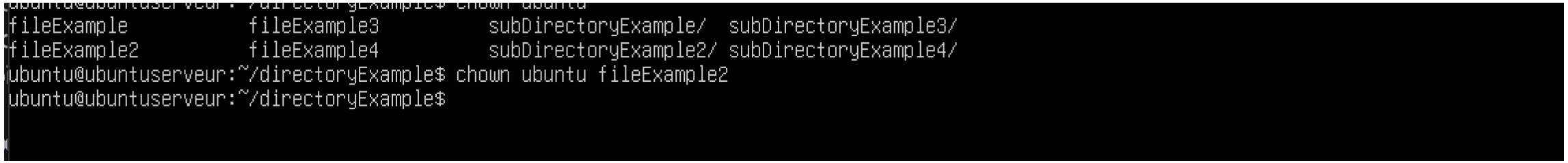
For example in the current folder you see in white the files (fileExample, fileExample2, fileExample3, fileExample4)

and in blue the folders : (subDirectoryExample, subDirectoryExample2, subDirectoryExample3, subDirectoryExample4)



Commande : chown

Changes the owner of a file (in the example i made ubuntu owner of fileExample2)



Commande : rm

Used to delete a file

You can also delete a folder by adding the argument –r

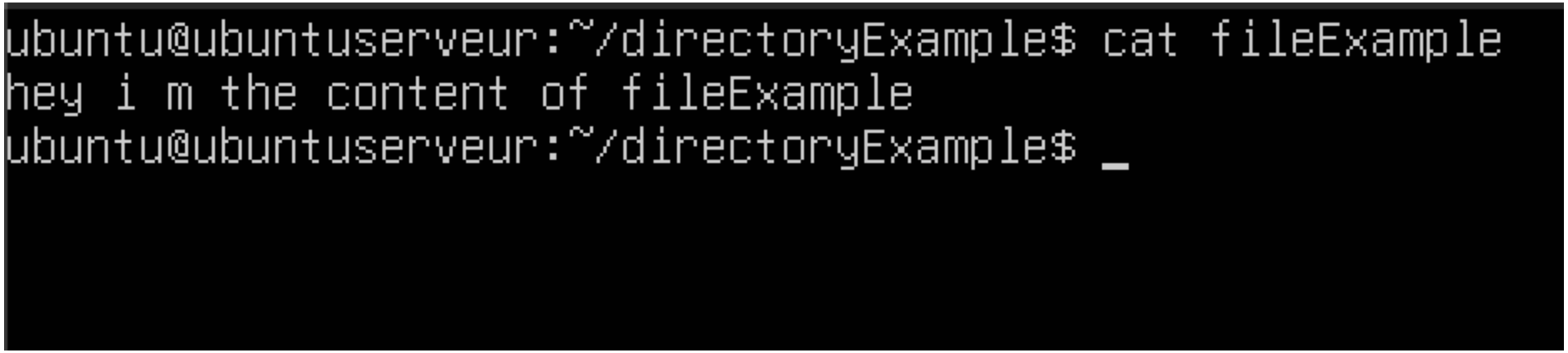
In the example i delete the fileExample3 and between the first and last ls we see it disapear

```
ubuntu@ubuntuserveur:~/directoryExample$ ls
fileExample  fileExample2  fileExample3  subDirectoryExample  subDirectoryExample2  subDirectoryExample3  subDirectoryExample4
ubuntu@ubuntuserveur:~/directoryExample$ rm fileExample3
ubuntu@ubuntuserveur:~/directoryExample$ ls
fileExample  fileExample2  subDirectoryExample  subDirectoryExample2  subDirectoryExample3  subDirectoryExample4
ubuntu@ubuntuserveur:~/directoryExample$
```

Commande : cat

Show the content of a file or joins the contents of multiples files

In this example the content of fileExample was : "hey i m the content of fileExample "



Commande : ifconfig

Display the network interface

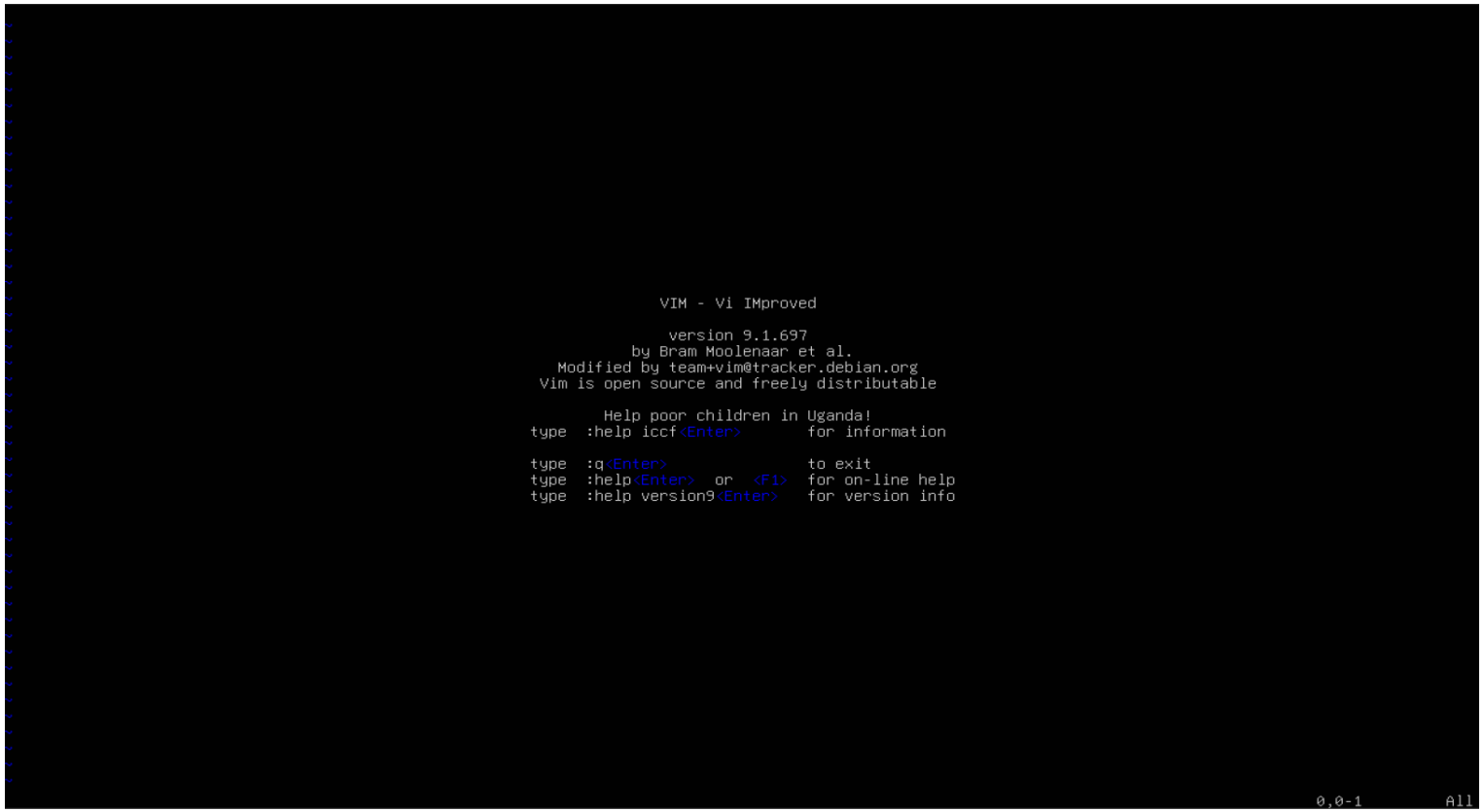
(can also be used to configure them)

```
ubuntu@ubuntuserveur:~/directoryExample$ ifconfig
enp0s3: flags=4163<UP,BROADCAST,RUNNING,MULTICAST>  mtu 1500
        inet 10.0.2.15  netmask 255.255.255.0  broadcast 10.0.2.255
        inet6 fe80::a00:27ff:feb9:38db  prefixlen 64  scopeid 0x20<link>
        inet6 fd17:625c:f037:2:a00:27ff:feb9:38db  prefixlen 64  scopeid 0x0<global>
        ether 08:00:27:b9:38:db  txqueuelen 1000  (Ethernet)
        RX packets 479  bytes 563945 (563.9 KB)
        RX errors 0  dropped 0  overruns 0  frame 0
        TX packets 237  bytes 20300 (20.3 KB)
        TX errors 0  dropped 0 overruns 0  carrier 0  collisions 0

lo: flags=73<UP,LOOPBACK,RUNNING>  mtu 65536
        inet 127.0.0.1  netmask 255.0.0.0
        inet6 ::1  prefixlen 128  scopeid 0x10<host>
        loop  txqueuelen 1000  (Local Loopback)
        RX packets 198  bytes 16802 (16.8 KB)
        RX errors 0  dropped 0  overruns 0  frame 0
        TX packets 198  bytes 16802 (16.8 KB)
        TX errors 0  dropped 0 overruns 0  carrier 0  collisions 0

ubuntu@ubuntuserveur:~/directoryExample$ _
```

Commande : vi

Basic text editor

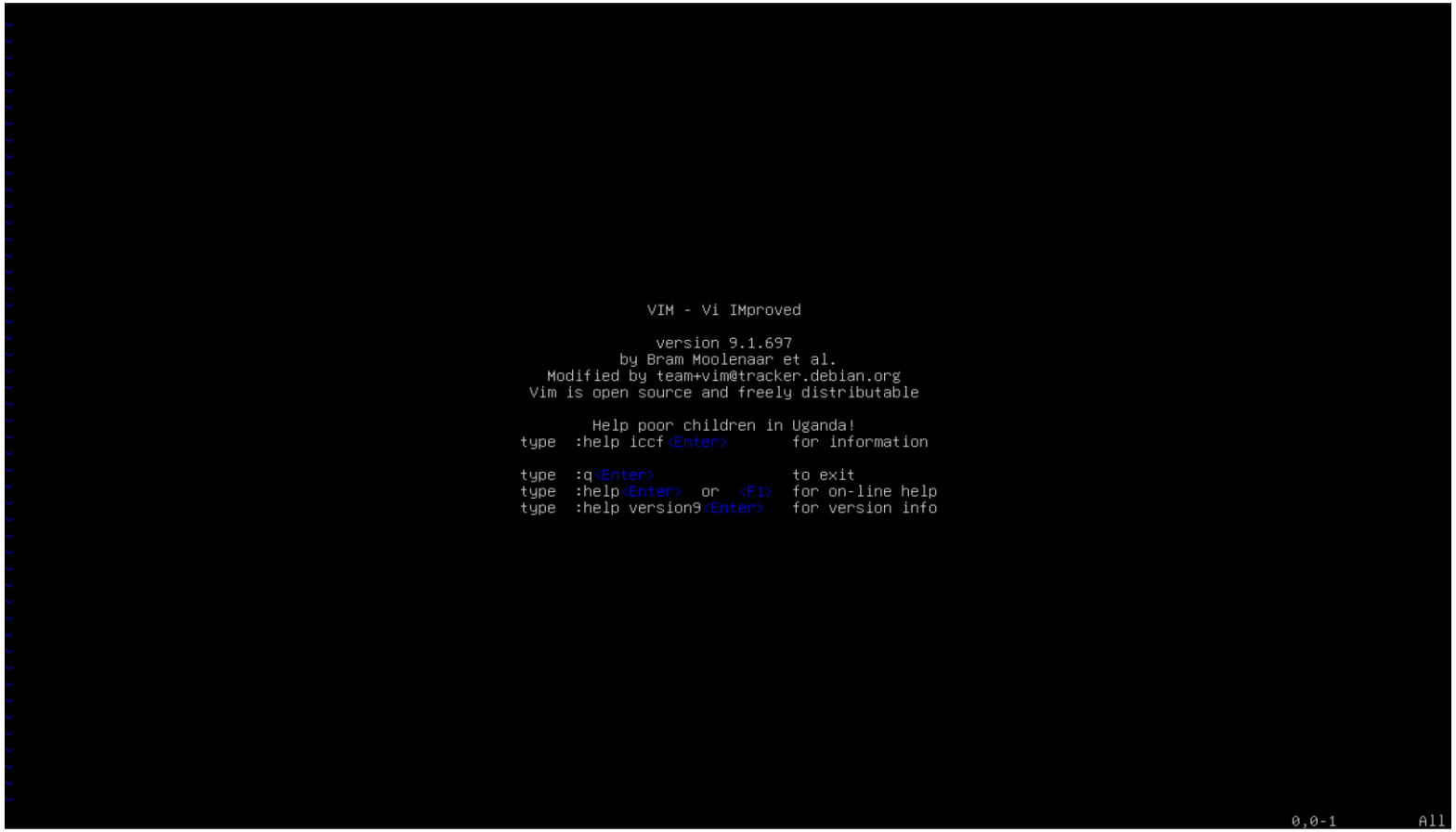
A bit complicated to use so i didn't really use it when I'm connected to my servers in ssh



Commande : vim

As hard to use as vi but is has more feature

this one is also bit complicated to use so i didn't really use it when I'm connected to my servers in ssh



Commande : nano

My personnal favorite and the command i always use when i work on my server, it is a simple, fast, light and simple to use text editor

Commande : sudo

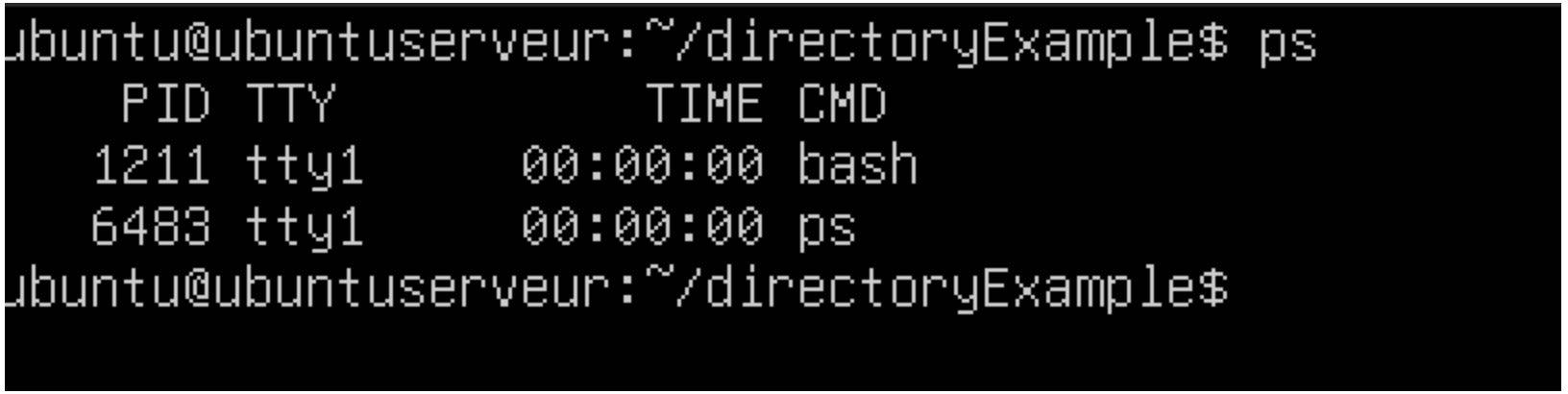
Sudo means Super User DO

Used to run command with root privileges

```
ubuntu@ubuntuserveur:~/directoryExample$ sudo
usage: sudo -h | -K | -k | -V
usage: sudo -v [-ABkNnS] [-g group] [-h host] [-p prompt] [-u user]
usage: sudo -l [-ABkNnS] [-g group] [-h host] [-p prompt] [-U user]
            [-u user] [command [arg ...]]
usage: sudo [-ABbEHkNnPS] [-r role] [-t type] [-C num] [-D directory]
            [-g group] [-h host] [-p prompt] [-R directory] [-T timeout]
            [-u user] [VAR=value] [-i | -s] [command [arg ...]]
usage: sudo -e [-ABkNnS] [-r role] [-t type] [-C num] [-D directory]
            [-g group] [-h host] [-p prompt] [-R directory] [-T timeout]
            [-u user] file ...
ubuntu@ubuntuserveur:~/directoryExample$
```

Commande : ps

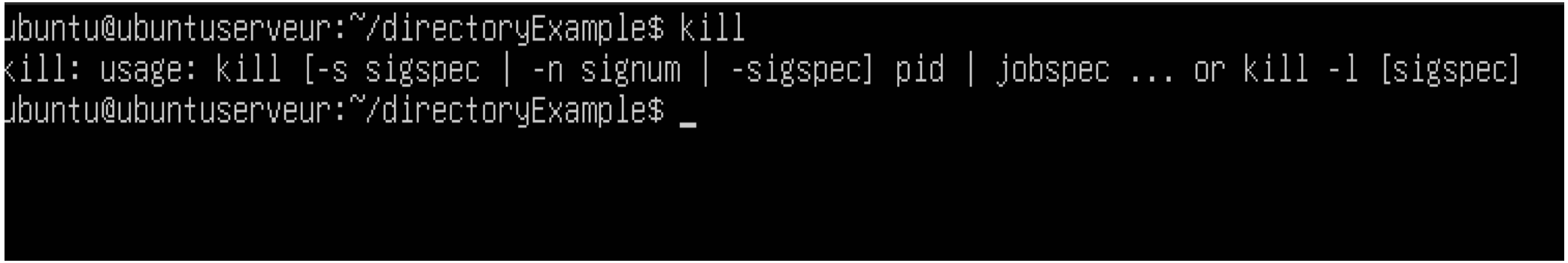
Used to list the currently running process and their PID



Commande : kill

Used to send signal to a programm (usually to stop it)

To stop a programm using kill you have to use the –9 argument



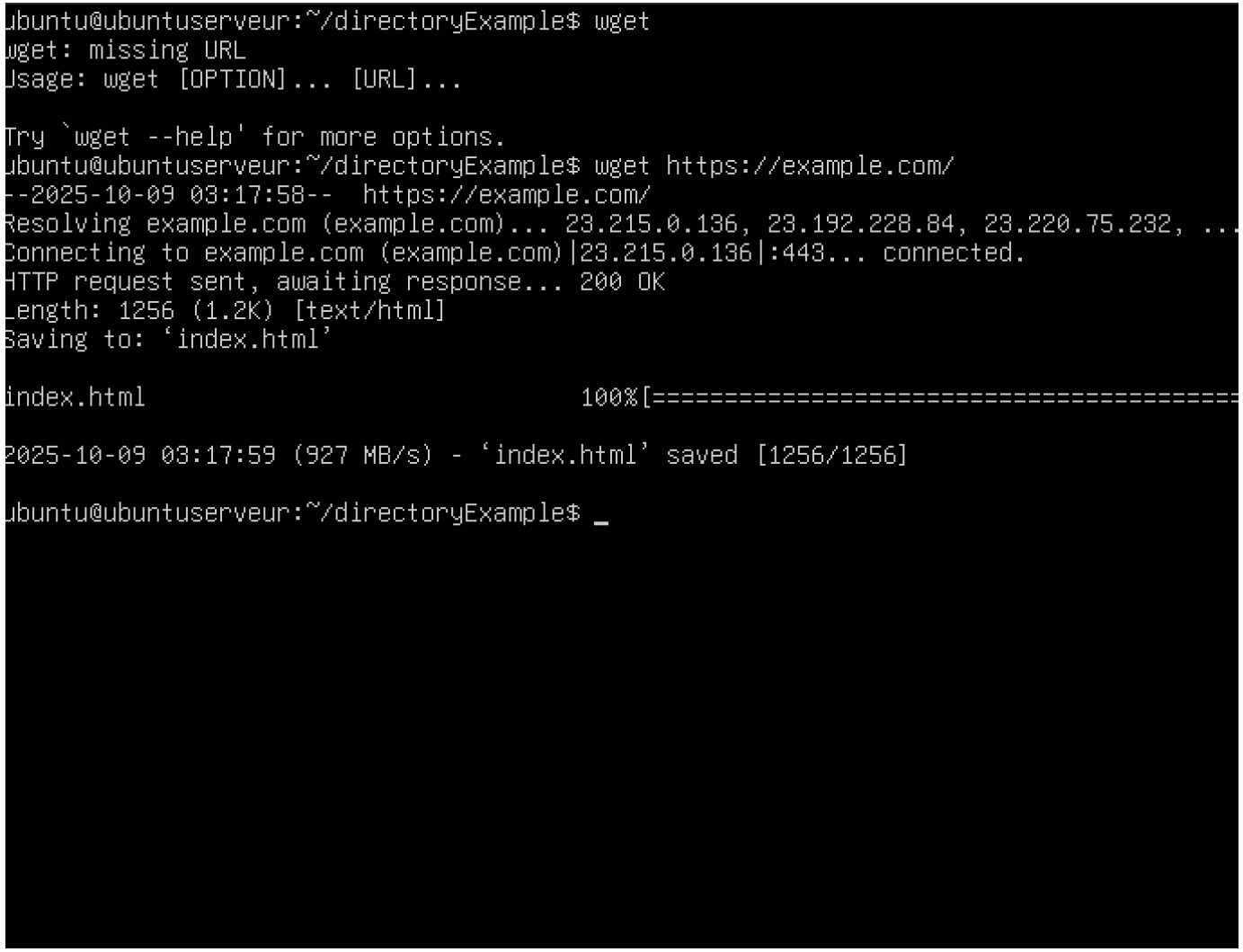
Commande : apt

Install, update and remove software

I had to use it to install net-tools to get the ifconfig command

Commande : wget

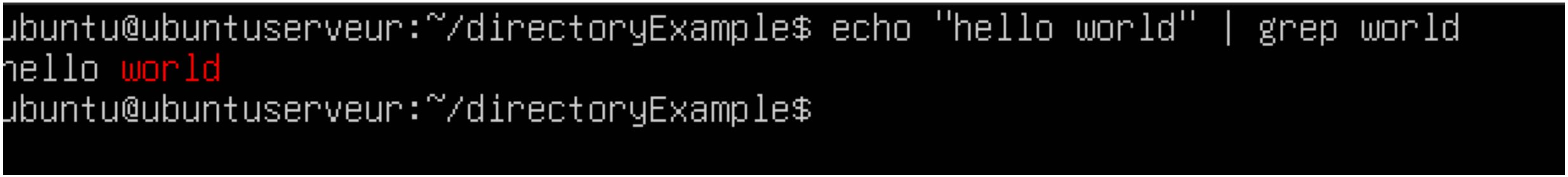
Download files throught http / https (a html page in my case)



Commande : grep

Find matching patterns or word

In my case i echo "hello world" in grep and ask him to find the word "world"



Commande : source

Execute a script in the current environnement (doesn't create a new one or create a new shell)

```
ubuntu@ubuntuserveur:~/directoryExample$ source
-bash: source: filename argument required
source: usage: source filename [arguments]
ubuntu@ubuntuserveur:~/directoryExample$ _
```

Commande : service

Start and stop system services

I use it a lot with mongodb (sudo systemctl status mongod)

```
ubuntu@ubuntuserveur:~/directoryExample$ service
Usage: service < option > | --status-all | [ service_name [ command | --full-restart ] ]
ubuntu@ubuntuserveur:~/directoryExample$ service
```