

Installing the environment

1. Downloading a Linux image in iso format.
2. Write the image to a flash card(RuFus).
3. Installing the Linux distribution. Updating the system.



Picture 1 - Elementary OS distro

4. Installing KVM, libvirt, qemu:

```
$ sudo apt update
```

```
$ sudo apt install qemu-kvm libvirt-daemon-system libvirt-clients bridge-utils virt-manager
```

5. Terraform installation.

6. Installing and configuring git.

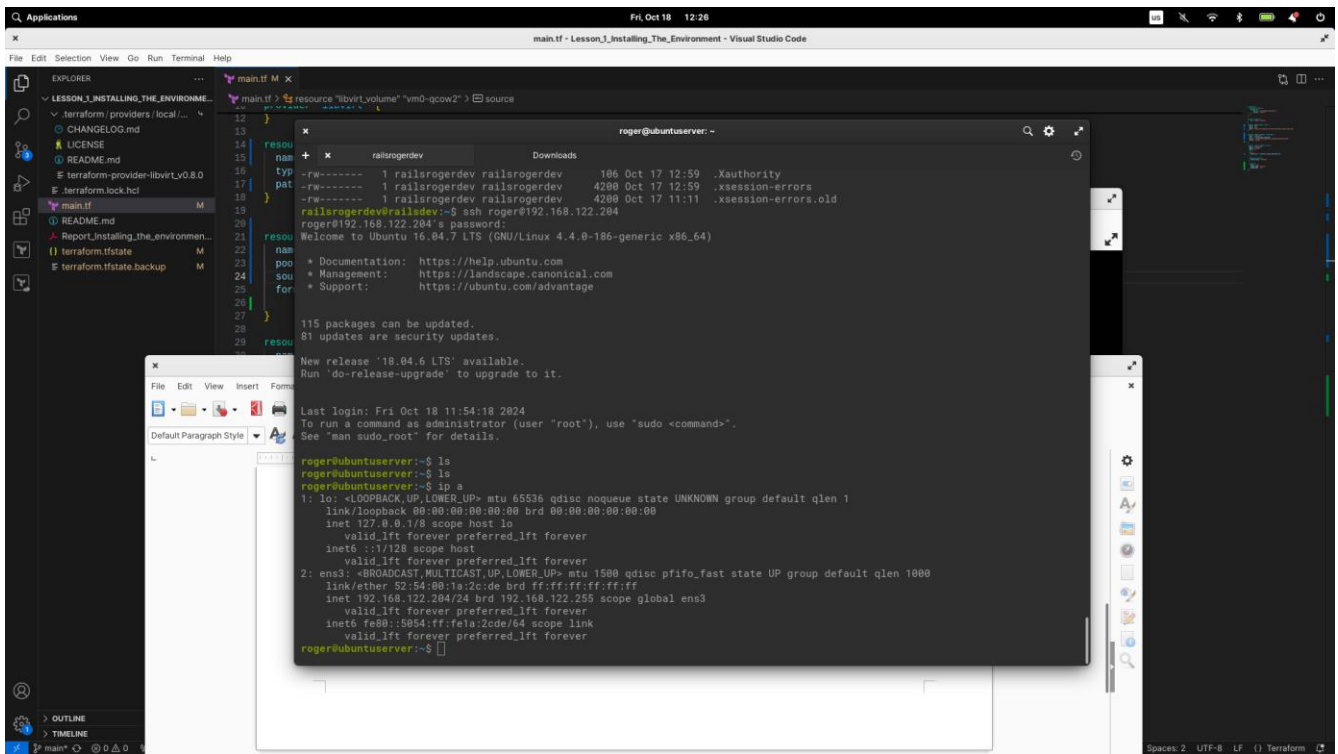
7. VScode installation.

8. Creating a terraform configuration file.

9. Creating a virtual machine.

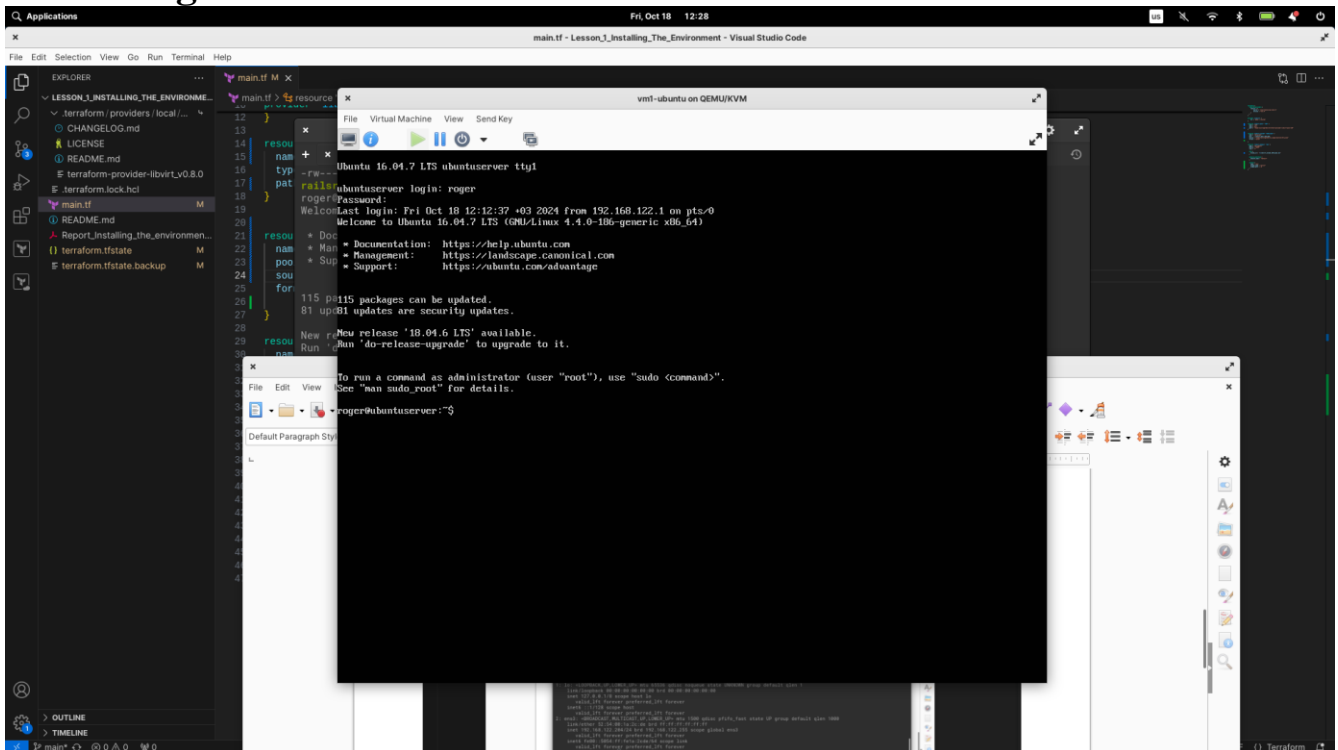
10. Connecting to the virtual machine via ssh.

```
ssh roger@192.168.122.204
```



Picture 2 – SSH connecting to VM

11. Testing virtual machine.



Picture 3 – Virtual Machine on KVM/QEMU

12. Commenting and pushing to the github repository.

Results

```
Applications Thu, Oct 10 14:03 railsrogerdev@railsdev: ~
railsrogerdev@railsdev:~$ kvm --version
QEMU emulator version 6.2.0 (Debian 1:6.2+dfsg-2ubuntu6.22)
Copyright (c) 2003-2021 Fabrice Bellard and the QEMU Project developers
railsrogerdev@railsdev:~$ terraform -v
Terraform v1.9.7-dev
on linux_amd64

Your version of Terraform is out of date! The latest version
is 1.9.7. You can update by downloading from https://www.terraform.io/downloads.html
railsrogerdev@railsdev:~$ code -v
1.94.1
e10f2369d0d9614a452462f2e01cdc4aa9486296
x64
railsrogerdev@railsdev:~$ git --version
git version 2.34.1
railsrogerdev@railsdev:~$ neofetch

      eeeeeeeeeeeeeeeee
      eeeeeeeeeeeeeeeee
      eeeee eeeeeeeeeee eeeee railsrogerdev@railsdev
      eeeee eeeee eeeee eeeee -----
      eeee eeeee eee eeee OS: elementary OS 7.1 Horus x86_64
      eeee eeee eee eeee Host: 81WL Lenovo IdeaPad S340-15IIL
      eee eee eee eee Kernel: 6.8.0-45-generic
      eee eee eee eee Uptime: 1 hour, 27 mins
      ee eee eee eeee Packages: 1883 (dpkg), 13 (flatpak),
      ee eee eeeee eeeee Shell: bash 5.1.16
      ee eee eeeee eeeee Resolution: 1920x1080
      ee eee eeeee eeeee DE: Pantheon
      eee eeee eeeee eeeee WM: Mutter(Gala)
      eee eeeeeeeee eeeee Theme: io.elementary.stylesheet.blueb
      eeeeeeeeeeeeeeeee Icons: elementary [GTK3]
      eeeeeee eeeeeeeee eeee Terminal: io.elementary.t
      eeeee eeeee eeeee CPU: Intel i5-1035G1 (8) @ 3.600GHz
      eeeee eeeee GPU: Intel Iris Plus Graphics G1
      eeeeeeeeeeeeeee Memory: 3877MiB / 7614MiB
```

