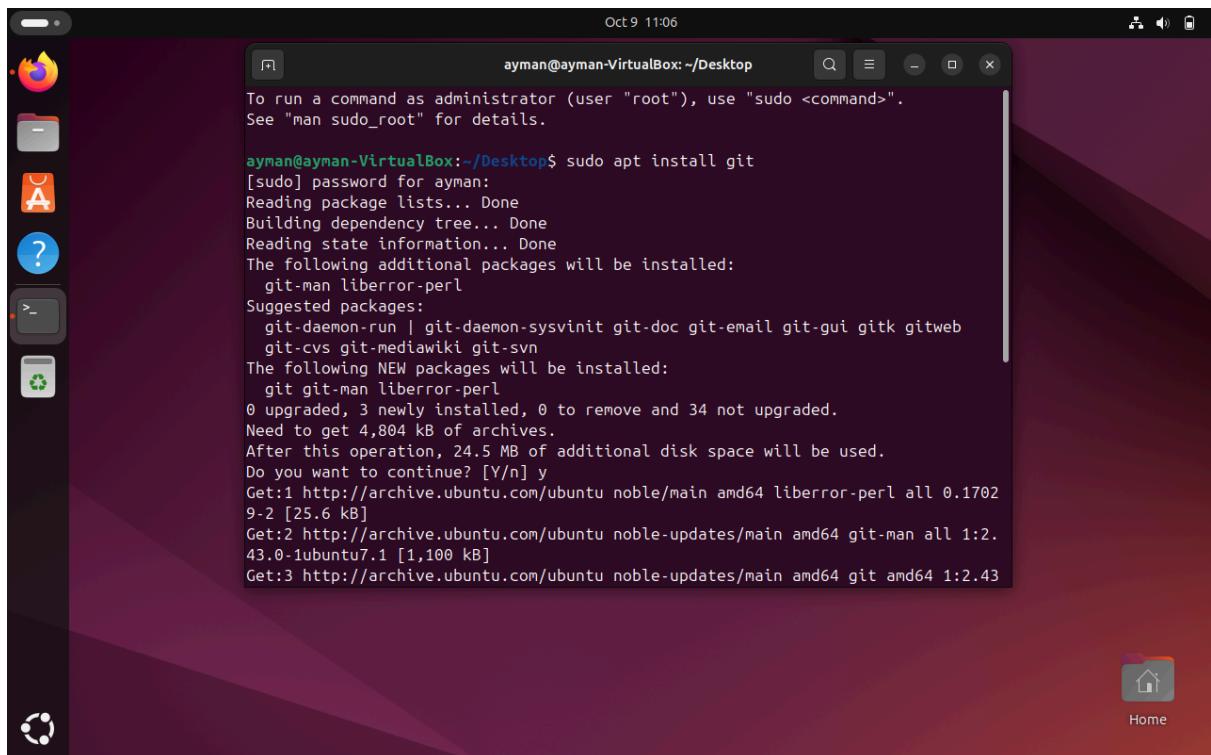


**Travaux pratique**

**Module: Integration continue**

**réalisé par: Ayman LASFAR**

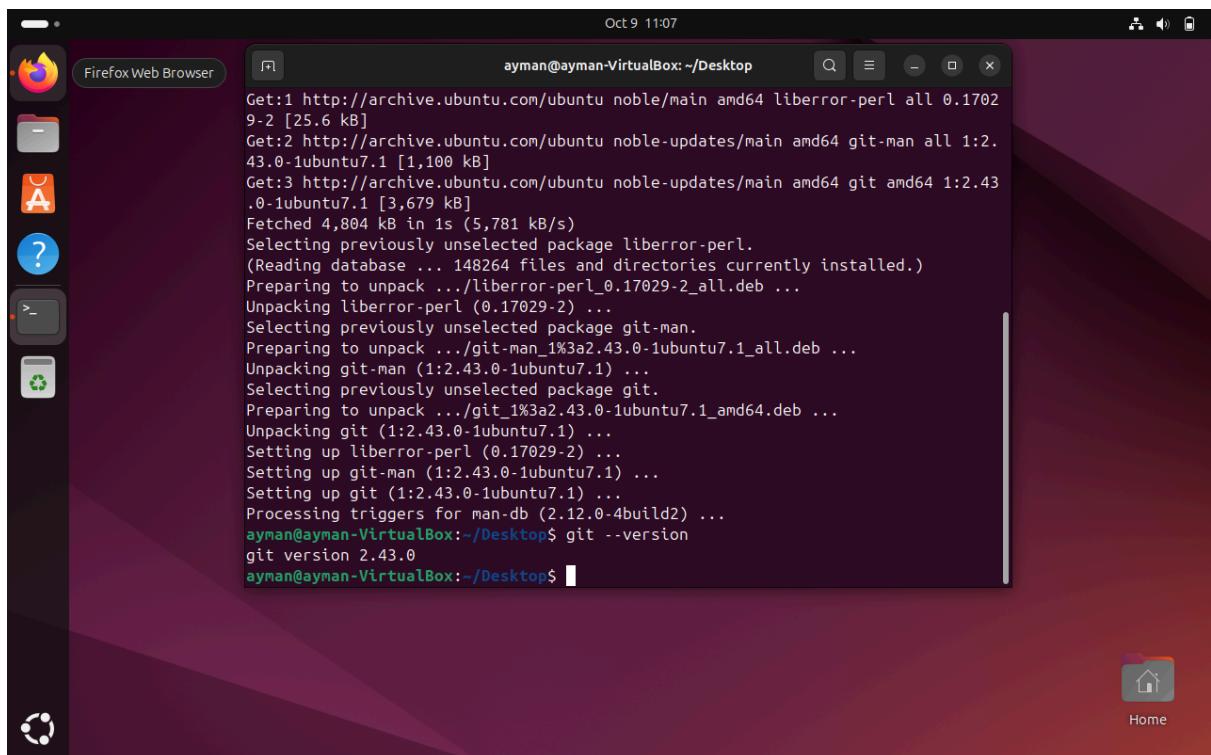
## Installation de GIT sur la machine virtuelle :



```
To run a command as administrator (user "root"), use "sudo <command>".
See "man sudo_root" for details.

ayman@ayman-VirtualBox:~/Desktop$ sudo apt install git
[sudo] password for ayman:
Reading package lists... Done
Building dependency tree... Done
Reading state information... Done
The following additional packages will be installed:
  git-man liberror-perl
Suggested packages:
  git-daemon-run | git-daemon-sysvinit git-doc git-email git-gui gitk gitweb
  git-cvs git-mediawiki git-svn
The following NEW packages will be installed:
  git git-man liberror-perl
0 upgraded, 3 newly installed, 0 to remove and 34 not upgraded.
Need to get 4,804 kB of archives.
After this operation, 24.5 MB of additional disk space will be used.
Do you want to continue? [Y/n] y
Get:1 http://archive.ubuntu.com/ubuntu noble/main amd64 liberror-perl all 0.1702
9-2 [25.6 kB]
Get:2 http://archive.ubuntu.com/ubuntu noble-updates/main amd64 git-man all 1:2.
43.0-1ubuntu7.1 [1,100 kB]
Get:3 http://archive.ubuntu.com/ubuntu noble-updates/main amd64 git amd64 1:2.43
.0-1ubuntu7.1 [3,679 kB]
Fetched 4,804 kB in 1s (5,781 kB/s)
Selecting previously unselected package liberror-perl.
(Reading database ... 148264 files and directories currently installed.)
Preparing to unpack .../liberror-perl_0.17029-2_all.deb ...
Unpacking liberror-perl (0.17029-2) ...
Selecting previously unselected package git-man.
Preparing to unpack .../git-man_1%3a2.43.0-1ubuntu7.1_all.deb ...
Unpacking git-man (1:2.43.0-1ubuntu7.1) ...
Selecting previously unselected package git.
Preparing to unpack .../git_1%3a2.43.0-1ubuntu7.1_amd64.deb ...
Unpacking git (1:2.43.0-1ubuntu7.1) ...
Setting up liberror-perl (0.17029-2) ...
Setting up git-man (1:2.43.0-1ubuntu7.1) ...
Setting up git (1:2.43.0-1ubuntu7.1) ...
Processing triggers for man-db (2.12.0-4build2) ...
ayman@ayman-VirtualBox:~/Desktop$ git --version
git version 2.43.0
ayman@ayman-VirtualBox:~/Desktop$
```

## Vérification :



```
ayman@ayman-VirtualBox:~/Desktop$ git --version
git version 2.43.0
ayman@ayman-VirtualBox:~/Desktop$
```

Paramétrage à la première utilisation de GIT , et la vérification des paramètres , et la création de répertoire de travaille :

Oct 9 11:13  
ayman@ayman-VirtualBox: ~/Desktop

```
Selecting previously unselected package git-man.  
Preparing to unpack .../git-man_1%3a2.43.0-1ubuntu7.1_all.deb ...  
Unpacking git-man (1:2.43.0-1ubuntu7.1) ...  
Selecting previously unselected package git.  
Preparing to unpack .../git_1%3a2.43.0-1ubuntu7.1_amd64.deb ...  
Unpacking git (1:2.43.0-1ubuntu7.1) ...  
Setting up liberror-perl (0.17029-2) ...  
Setting up git-man (1:2.43.0-1ubuntu7.1) ...  
Setting up git (1:2.43.0-1ubuntu7.1) ...  
Processing triggers for man-db (2.12.0-4build2) ...  
ayman@ayman-VirtualBox:~/Desktop$ git --version  
git version 2.43.0  
ayman@ayman-VirtualBox:~/Desktop$ git config --global user.name "Ayman"  
ayman@ayman-VirtualBox:~/Desktop$ git config --global user.email "lasfarayman001@gmail.com"  
ayman@ayman-VirtualBox:~/Desktop$ git config --global color.ui auto  
ayman@ayman-VirtualBox:~/Desktop$ git config core.editor emacs  
ayman@ayman-VirtualBox:~/Desktop$ git config list  
error: key does not contain a section: list  
ayman@ayman-VirtualBox:~/Desktop$ git config --list  
user.name=Ayman  
user.email=lasfarayman001@gmail.com  
color.ui=auto  
core.editor=emacs  
ayman@ayman-VirtualBox:~/Desktop$ mkdir workshop  
ayman@ayman-VirtualBox:~/Desktop$
```

Home

Création du fichier index.html avec un contenu ‘Initial version’ , et initialisation de dépôt workshop :

Oct 9 11:26  
ayman@ayman-VirtualBox: ~/Desktop

```
core.editor=emacs  
ayman@ayman-VirtualBox:~/Desktop$ mkdir workshop  
ayman@ayman-VirtualBox:~/Desktop$ touch index.html  
ayman@ayman-VirtualBox:~/Desktop$ nano index.html  
ayman@ayman-VirtualBox:~/Desktop$ nano index.html  
ayman@ayman-VirtualBox:~/Desktop$ ls  
index.html workshop  
ayman@ayman-VirtualBox:~/Desktop$ firefox index.html  
Gtk-Message: 11:24:01.809: Not loading module "atk-bridge": The functionality is provided by GTK natively. Please try to not load it.  
ayman@ayman-VirtualBox:~/Desktop$ git init  
hint: Using 'master' as the name for the initial branch. This default branch name  
hint: is subject to change. To configure the initial branch name to use in all  
hint: of your new repositories, which will suppress this warning, call:  
hint:  
hint: git config --global init.defaultBranch <name>  
hint:  
hint: Names commonly chosen instead of 'master' are 'main', 'trunk' and  
hint: 'development'. The just-created branch can be renamed via this command:  
hint:  
hint: git branch -m <name>  
Initialized empty Git repository in /home/ayman/Desktop/.git/  
ayman@ayman-VirtualBox:~/Desktop$ git init  
Reinitialized existing Git repository in /home/ayman/Desktop/.git/  
ayman@ayman-VirtualBox:~/Desktop$
```

Home

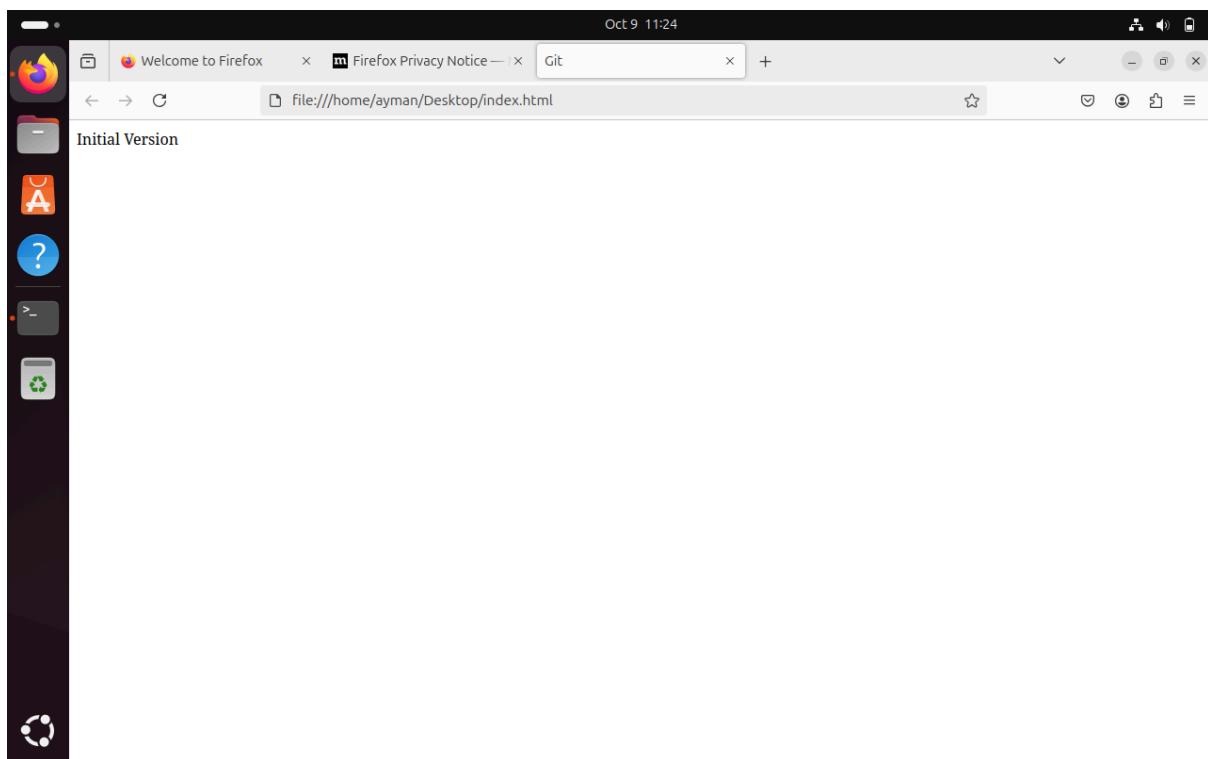
The screenshot shows a terminal window titled "GNU nano 7.2" with the file "index.html" open. The content of the file is:

```
<head>
<title>Git</title>
</head>

<body>
Initial Version
</body>
</html>
```

The terminal window has a dark theme and includes a set of keyboard shortcuts at the bottom.

Voici l'aperçu du fichier 'index.html' en utilisant la commande 'firefox index.html' :



Lancement de 'git status' pour obtenir l'état de suivi , 'git add index.html' pour l'ajout de fichier au suivi , 'git commit' pour la validation des modifications au dépôt :

```
ayman@ayman-VirtualBox: ~/Desktop
hint: git config --global init.defaultBranch <name>
hint:
hint: Names commonly chosen instead of 'master' are 'main', 'trunk' and
hint: 'development'. The just-created branch can be renamed via this command:
hint:
hint: git branch -m <name>
Initialized empty Git repository in /home/ayman/Desktop/.git/
ayman@ayman-VirtualBox:~/Desktop$ git init
Reinitialized existing Git repository in /home/ayman/Desktop/.git/
ayman@ayman-VirtualBox:~/Desktop$ git status
On branch master

No commits yet

Untracked files:
  (use "git add <file>..." to include in what will be committed)
    index.html

nothing added to commit but untracked files present (use "git add" to track)
ayman@ayman-VirtualBox:~/Desktop$ git add index.html
ayman@ayman-VirtualBox:~/Desktop$ git commit -m"Initial Version"
[master (root-commit) c5bdcc5] Initial Version
 1 file changed, 10 insertions(+)
 create mode 100644 index.html
ayman@ayman-VirtualBox:~/Desktop$
```

Modification de fichier index.html :

```
ayman@ayman-VirtualBox: ~/Desktop
GNU nano 7.2          index.html

<html>
<head>
<title>Git</title>
</head>
<body>
Seconde Version
</body>
</html>
```

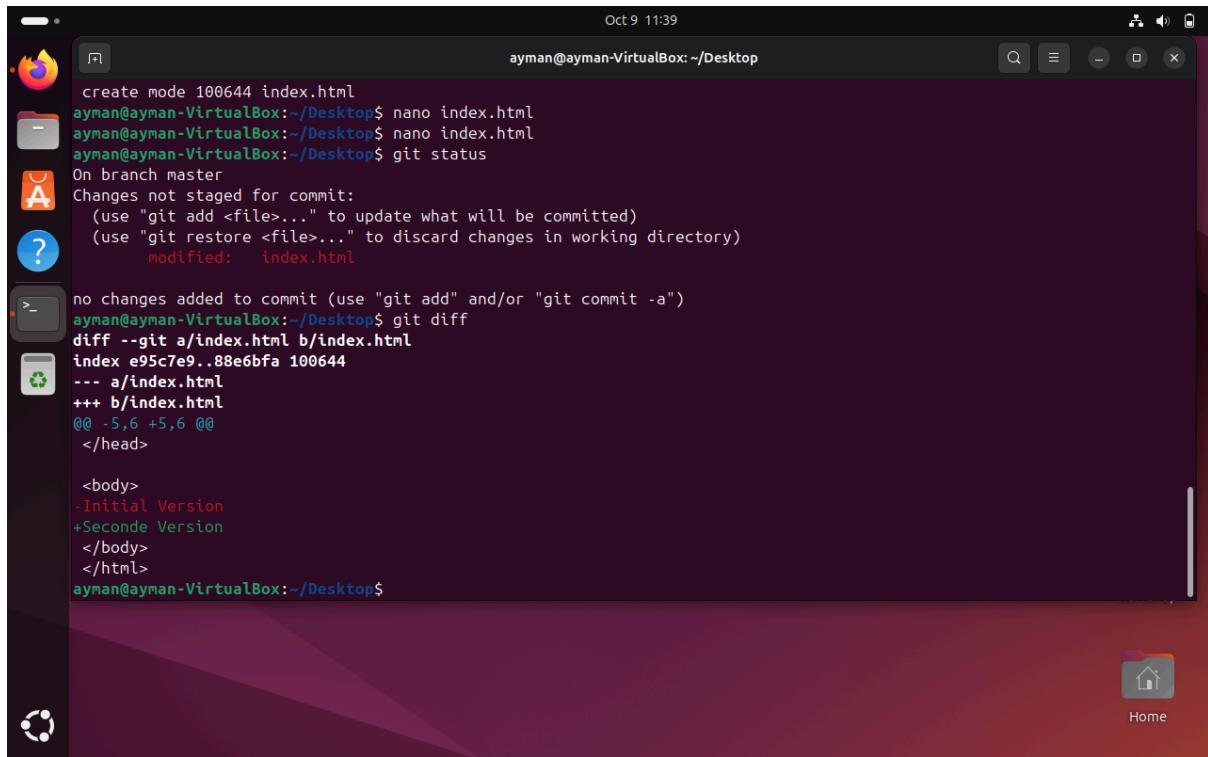
The terminal shows the content of the index.html file in nano editor. The file contains the following HTML code:

```
<html>
<head>
<title>Git</title>
</head>
<body>
Seconde Version
</body>
</html>
```

The bottom of the terminal shows the nano editor's command bar with various keyboard shortcuts:

- ^C Help
- ^X Exit
- ^O Write Out
- ^R Read File
- ^W Where Is
- ^\\ Replace
- ^K Cut
- ^U Paste
- [ Read 10 lines ]
- ^T Execute
- ^J Justify
- ^C Location
- ^G Go To Line
- M-U Undo
- M-E Redo

Lancement de 'git status' pour constater l'état particulier du suivi , 'git diff' pour voir la différence entre le fichier et le dépôt :

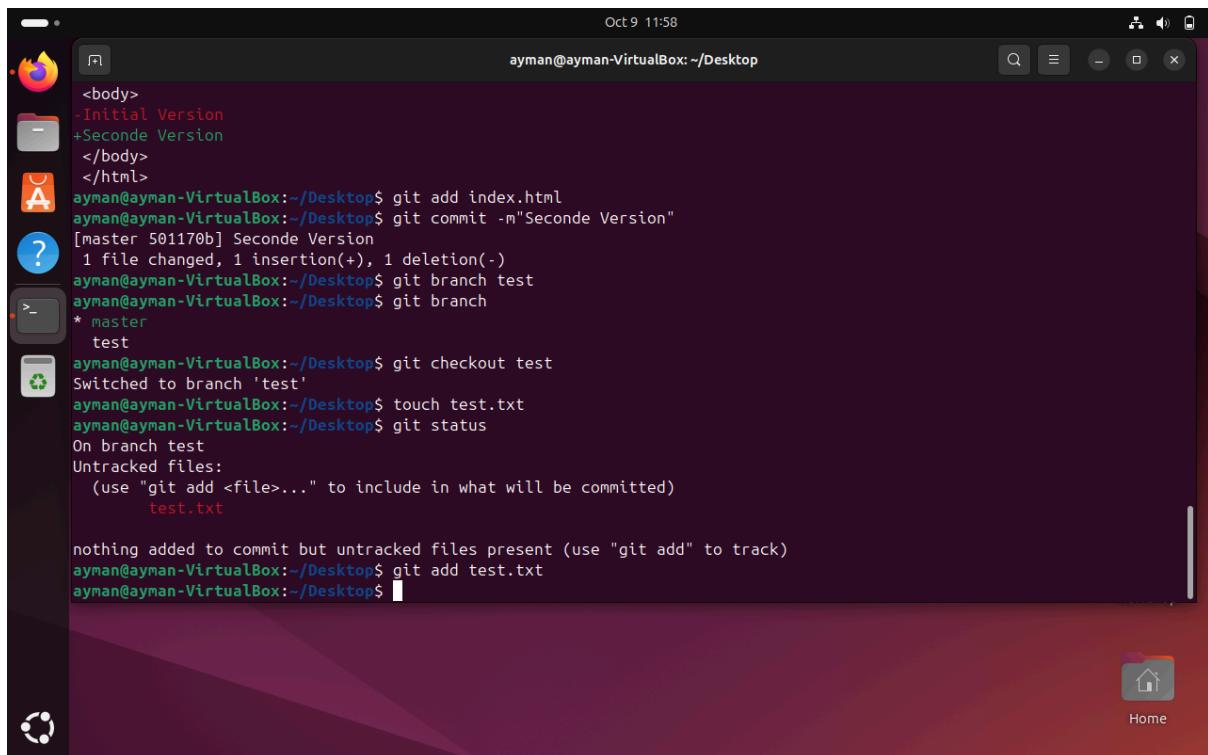


```
Oct 9 11:39
ayman@ayman-VirtualBox: ~/Desktop
create mode 100644 index.html
ayman@ayman-VirtualBox:~/Desktop$ nano index.html
ayman@ayman-VirtualBox:~/Desktop$ nano index.html
ayman@ayman-VirtualBox:~/Desktop$ git status
On branch master
Changes not staged for commit:
  (use "git add <file>..." to update what will be committed)
  (use "git restore <file>..." to discard changes in working directory)
    modified:   index.html

no changes added to commit (use "git add" and/or "git commit -a")
ayman@ayman-VirtualBox:~/Desktop$ git diff
diff --git a/index.html b/index.html
index e95c7e9..88e6bfa 100644
--- a/index.html
+++ b/index.html
@@ -5,6 +5,6 @@
 </head>

 <body>
-Initial Version
+Seconde Version
</body>
</html>
ayman@ayman-VirtualBox:~/Desktop$
```

Ajout des nouvelles modifications au suivi , validation des modifications au dépôt , création et le passage à la branch test , et ajout d'un nouveau fichier :



```
Oct 9 11:58
ayman@ayman-VirtualBox:~/Desktop
<body>
-Initial Version
+Seconde Version
</body>
</html>
ayman@ayman-VirtualBox:~/Desktop$ git add index.html
ayman@ayman-VirtualBox:~/Desktop$ git commit -m"Seconde Version"
[master 501170b] Seconde Version
 1 file changed, 1 insertion(+), 1 deletion(-)
ayman@ayman-VirtualBox:~/Desktop$ git branch test
ayman@ayman-VirtualBox:~/Desktop$ git branch
* master
  test
ayman@ayman-VirtualBox:~/Desktop$ git checkout test
Switched to branch 'test'
ayman@ayman-VirtualBox:~/Desktop$ touch test.txt
ayman@ayman-VirtualBox:~/Desktop$ git status
On branch test
Untracked files:
  (use "git add <file>..." to include in what will be committed)
    test.txt

nothing added to commit but untracked files present (use "git add" to track)
ayman@ayman-VirtualBox:~/Desktop$ git add test.txt
ayman@ayman-VirtualBox:~/Desktop$
```

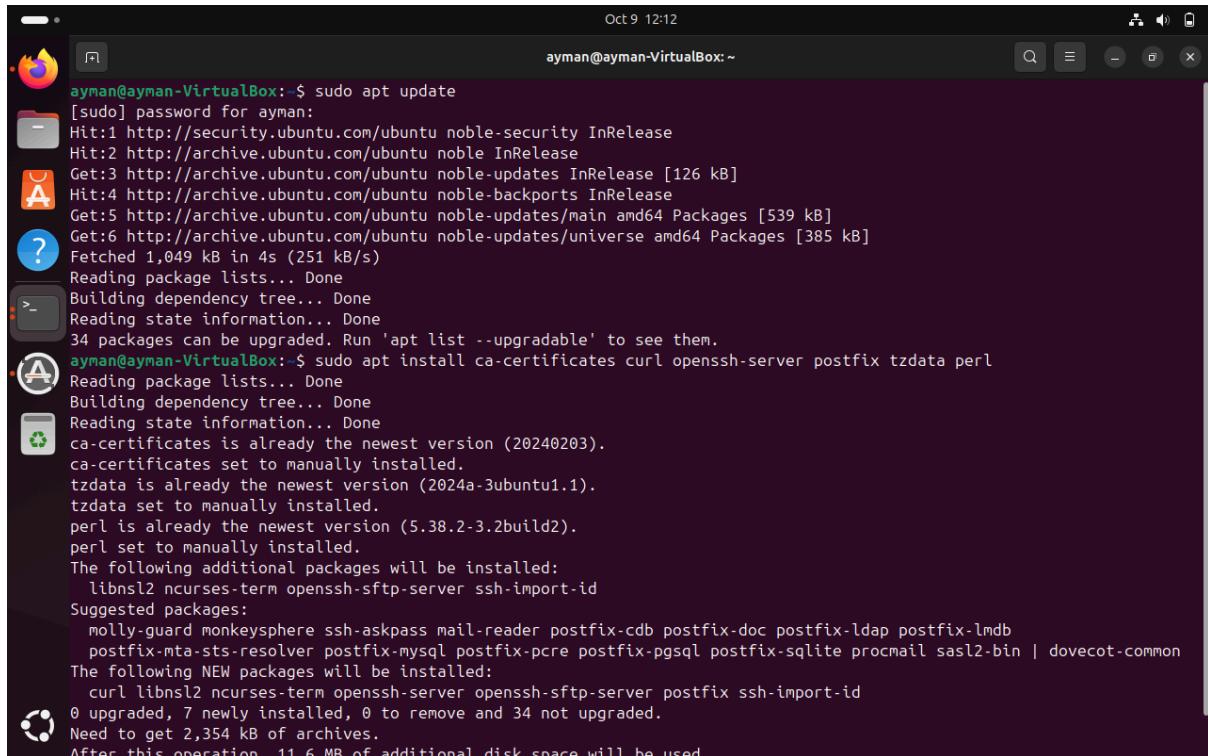
Intégration de la branche test dans la branche master :

ayman@ayman-VirtualBox:~/Desktop\$ git merge test  
Updating 501170b..ad321de  
Fast-forward  
 test.txt | 0  
 1 file changed, 0 insertions(+), 0 deletions(-)  
 create mode 100644 test.txt  
ayman@ayman-VirtualBox:~/Desktop\$ git log  
commit ad321def6f244d06f7ec399764b88bb9aa709346 (HEAD -> master, test)  
Author: Ayman <lasfarayman001@gmail.com>  
Date: Wed Oct 9 11:59:48 2024 +0200  
  
 Ajout du fichier test.txt  
  
commit 501170b5a81f0b0185d5b68e7053a73223ba6ca1  
Author: Ayman <lasfarayman001@gmail.com>  
Date: Wed Oct 9 11:40:55 2024 +0200  
  
 Seconde Version  
  
commit c5bdc5262f31130f14cb9abd0bce2f9498b8d809  
Author: Ayman <lasfarayman001@gmail.com>  
Date: Wed Oct 9 11:28:16 2024 +0200  
  
 Initial Version  
ayman@ayman-VirtualBox:~/Desktop\$

Suppression de la branche :

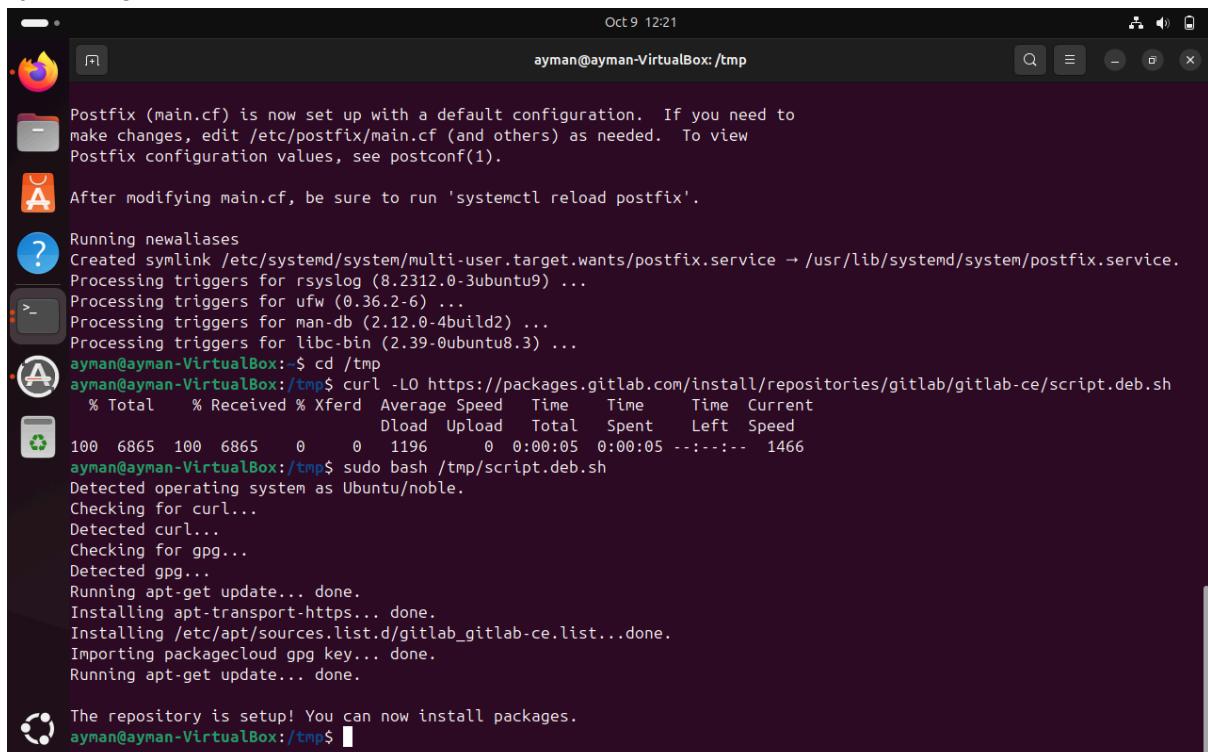
ayman@ayman-VirtualBox:~/Desktop\$ git branch -d test  
Deleted branch test (was ad321de).  
ayman@ayman-VirtualBox:~/Desktop\$

## Mise à jour et installation des dépendances :



```
ayman@ayman-VirtualBox:~$ sudo apt update
[sudo] password for ayman:
Hit:1 http://security.ubuntu.com/ubuntu noble-security InRelease
Hit:2 http://archive.ubuntu.com/ubuntu noble InRelease
Get:3 http://archive.ubuntu.com/ubuntu noble-updates InRelease [126 kB]
Hit:4 http://archive.ubuntu.com/ubuntu noble-backports InRelease
Get:5 http://archive.ubuntu.com/ubuntu noble-updates/main amd64 Packages [539 kB]
Get:6 http://archive.ubuntu.com/ubuntu noble-updates/universe amd64 Packages [385 kB]
Fetched 1,049 kB in 4s (251 kB/s)
Reading package lists... Done
Building dependency tree... Done
Reading state information... Done
34 packages can be upgraded. Run 'apt list --upgradable' to see them.
ayman@ayman-VirtualBox:~$ sudo apt install ca-certificates curl openssh-server postfix tzdata perl
Reading package lists... Done
Building dependency tree... Done
Reading state information... Done
ca-certificates is already the newest version (20240203).
ca-certificates set to manually installed.
tzdata is already the newest version (2024a-3ubuntu1.1).
tzdata set to manually installed.
perl is already the newest version (5.38.2-3.2build2).
perl set to manually installed.
The following additional packages will be installed:
  libnsl2 ncurses-term openssh-sftp-server ssh-import-id
Suggested packages:
  molly-guard monkeysphere ssh-askpass mail-reader postfix-cdb postfix-doc postfix-ldap postfix-lmdb
  postfix-mta-sts-resolver postfix-mysql postfix-pcre postfix-pgsql postfix-sqlite procmail sasl2-bin | dovecot-common
The following NEW packages will be installed:
  curl libnsl2 ncurses-term openssh-server openssh-sftp-server postfix ssh-import-id
0 upgraded, 7 newly installed, 0 to remove and 34 not upgraded.
Need to get 2,354 kB of archives.
After this operation, 11.6 MB of additional disk space will be used.
```

## Ajout de gitlab comme source de paquet :



```
ayman@ayman-VirtualBox:~$ Postfix (main.cf) is now set up with a default configuration. If you need to
make changes, edit /etc/postfix/main.cf (and others) as needed. To view
Postfix configuration values, see postconf(1).
ayman@ayman-VirtualBox:~$ After modifying main.cf, be sure to run 'systemctl reload postfix'.
ayman@ayman-VirtualBox:~$ Running newaliases
ayman@ayman-VirtualBox:~$ Created symlink /etc/systemd/system/multi-user.target.wants/postfix.service → /usr/lib/systemd/system/postfix.service.
ayman@ayman-VirtualBox:~$ Processing triggers for rsyslog (8.2312.0-3ubuntu9) ...
ayman@ayman-VirtualBox:~$ Processing triggers for ufw (0.36.2-6) ...
ayman@ayman-VirtualBox:~$ Processing triggers for man-db (2.12.0-4build2) ...
ayman@ayman-VirtualBox:~$ Processing triggers for libc-bin (2.39-0ubuntu8.3) ...
ayman@ayman-VirtualBox:~$ cd /tmp
ayman@ayman-VirtualBox:/tmp$ curl -LO https://packages.gitlab.com/install/repositories/gitlab/gitlab-ce/script.deb.sh
% Total    % Received % Xferd  Average Speed   Time   Time     Current
          Dload  Upload Total Spent   Left Speed
100  6865  100  6865    0     0  1196      0  0:00:05  0:00:05  --- 1466
ayman@ayman-VirtualBox:/tmp$ sudo bash /tmp/script.deb.sh
Detected operating system as Ubuntu/noble.
Checking for curl...
Detected curl...
Checking for gpg...
Detected gpg...
Running apt-get update... done.
Installing apt-transport-https... done.
Installing /etc/apt/sources.list.d/gitlab_gitlab-ce.list...done.
Importing packagecloud gpg key... done.
Running apt-get update... done.

The repository is setup! You can now install packages.
ayman@ayman-VirtualBox:/tmp$
```

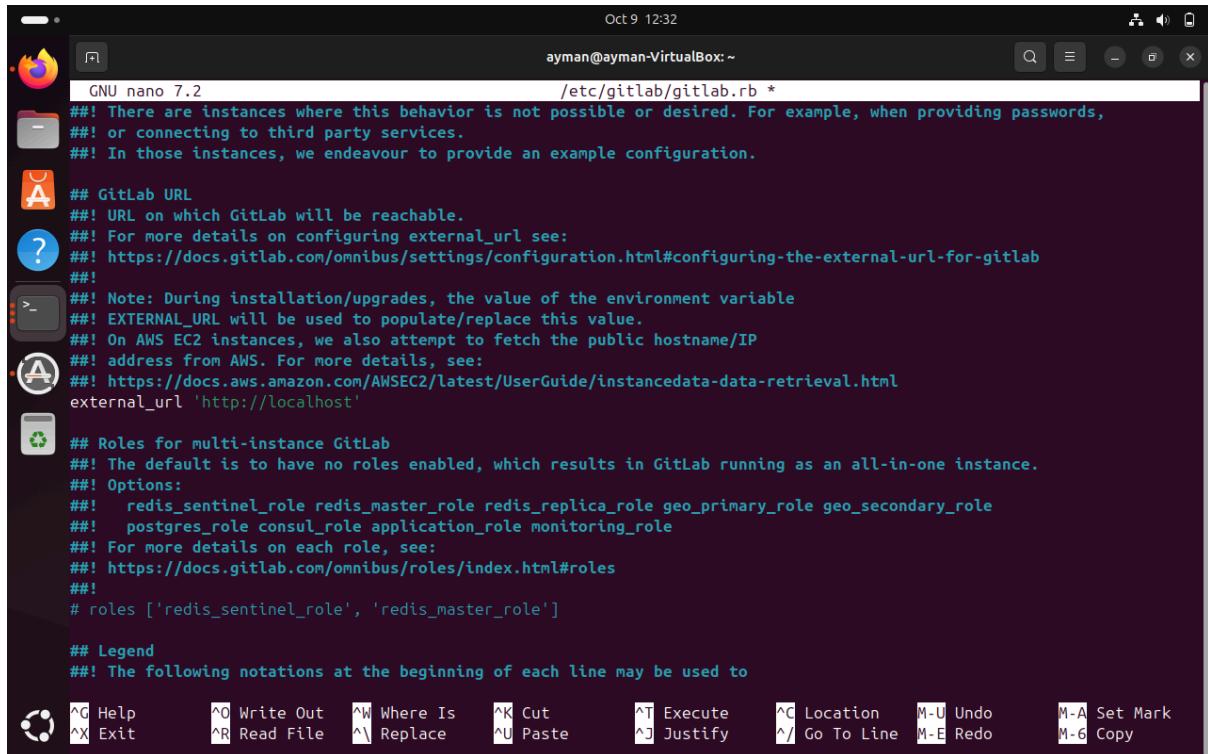
## Installation de gitlab-ce :

```
Running apt-get update... done.  
The repository is setup! You can now install packages.  
ayman@ayman-VirtualBox:/tmp$ sudo apt install gitlab-ce  
Reading package lists... Done  
Building dependency tree... Done  
Reading state information... Done  
The following NEW packages will be installed:  
  gitlab-ce  
0 upgraded, 1 newly installed, 0 to remove and 34 not upgraded.  
Need to get 1,063 MB of archives.  
After this operation, 3,242 MB of additional disk space will be used.  
Get:1 https://packages.gitlab.com/gitlab/gitlab-ce/ubuntu/noble/main amd64 gitlab-ce amd64 17.4.1-ce.0 [1,063 MB]  
Fetched 1,063 MB in 2min 17s (7,786 kB/s)  
Selecting previously unselected package gitlab-ce.  
(Reading database ... 152466 files and directories currently installed.)  
Preparing to unpack .../gitlab-ce_17.4.1-ce.0_amd64.deb ...  
Unpacking gitlab-ce (17.4.1-ce.0) ...  
Setting up gitlab-ce (17.4.1-ce.0) ...  
It looks like GitLab has not been configured yet; skipping the upgrade script.  
* . * .  
*** . ***  
***** . *****  
.***** . *****  
***** . *****  
***** , ***** ,  
**** , **** ,  
*** , *** ,  
** , ** ,  
* , *
```

## Paramétrage :

```
ayman@ayman-VirtualBox:~$ sudo nano /etc/gitlab/gitlab.rb  
[sudo] password for ayman:  
ayman@ayman-VirtualBox:~$ sudo gitlab-ctl reconfigure  
[2024-10-09T12:35:20+02:00] INFO: Started Cinc Zero at chefzero://localhost:1 with repository at /opt/gitlab/embedded (0  
ne version per cookbook)  
Cinc Client, version 18.3.0  
Patents: https://www.chef.io/patents  
Infra Phase starting  
[2024-10-09T12:35:21+02:00] INFO: *** Cinc Client 18.3.0 ***  
[2024-10-09T12:35:21+02:00] INFO: Platform: x86_64-linux  
[2024-10-09T12:35:21+02:00] INFO: Cinc-client pid: 20708  
[2024-10-09T12:35:23+02:00] INFO: Setting the run_list to ["recipe[gitlab]"] from CLI options  
[2024-10-09T12:35:23+02:00] INFO: Run List is [recipe[gitlab]]  
[2024-10-09T12:35:23+02:00] INFO: Run List expands to [gitlab]  
[2024-10-09T12:35:23+02:00] INFO: Starting Cinc Client Run for ayman-VirtualBox  
[2024-10-09T12:35:23+02:00] INFO: Running start handlers  
[2024-10-09T12:35:23+02:00] INFO: Start handlers complete.  
Resolving cookbooks for run list: ["gitlab"]  
[2024-10-09T12:35:24+02:00] INFO: Loading cookbooks [gitlab@0.0.1, package@0.1.0, logrotate@0.1.0, postgresql@0.1.0, red  
is@0.1.0, monitoring@0.1.0, registry@0.1.0, mattermost@0.1.0, consul@0.1.0, gitaly@0.1.0, praefect@0.1.0, gitlab-kas@0.1  
.0, gitlab-pages@0.1.0, letsencrypt@0.1.0, nginx@0.1.0, runit@5.1.7, acme@4.1.6, crond@0.1.0]  
Synchronizing cookbooks:  
[2024-10-09T12:35:24+02:00] INFO: Storing updated cookbooks/gitlab/libraries/account_helper.rb in the cache.  
[2024-10-09T12:35:24+02:00] INFO: Storing updated cookbooks/gitlab/libraries/gitlab_mattermost.rb in the cache.  
[2024-10-09T12:35:24+02:00] INFO: Storing updated cookbooks/gitlab/libraries/helper.rb in the cache.  
[2024-10-09T12:35:24+02:00] INFO: Storing updated cookbooks/gitlab/libraries/bash_hide_env.rb in the cache.  
[2024-10-09T12:35:24+02:00] INFO: Storing updated cookbooks/gitlab/libraries/helpers/base_pg_helper.rb in the cache.  
[2024-10-09T12:35:24+02:00] INFO: Storing updated cookbooks/gitlab/libraries/gitlab_rails.rb in the cache.  
[2024-10-09T12:35:24+02:00] INFO: Storing updated cookbooks/gitlab/libraries/gitlab_exporter.rb in the cache.  
[2024-10-09T12:35:24+02:00] INFO: Storing updated cookbooks/gitlab/libraries/gitlab_shell.rb in the cache.  
[2024-10-09T12:35:24+02:00] INFO: Storing updated cookbooks/gitlab/libraries/gitlab_sshd_helper.rb in the cache.  
[2024-10-09T12:35:24+02:00] INFO: Storing updated cookbooks/gitlab/libraries/helpers/base_helper.rb in the cache.  
[2024-10-09T12:35:24+02:00] INFO: Storing updated cookbooks/gitlab/libraries/helpers/no_helper.rb in the cache.
```

## Modification des paramètres :



The screenshot shows a terminal window titled "ayman@ayman-VirtualBox:~". The file being edited is "/etc/gitlab/gitlab.rb". The content of the file is as follows:

```
GNU nano 7.2 /etc/gitlab/gitlab.rb *
##! There are instances where this behavior is not possible or desired. For example, when providing passwords,
##! or connecting to third party services.
##! In those instances, we endeavour to provide an example configuration.

## GitLab URL
##! URL on which GitLab will be reachable.
##! For more details on configuring external_url see:
##! https://docs.gitlab.com/omnibus/settings/configuration.html#configuring-the-external-url-for-gitlab
##!
##! Note: During installation/upgrades, the value of the environment variable
##! EXTERNAL_URL will be used to populate/replace this value.
##! On AWS EC2 instances, we also attempt to fetch the public hostname/IP
##! address from AWS. For more details, see:
##! https://docs.aws.amazon.com/AWSEC2/latest/UserGuide/instancedata-data-retrieval.html
external_url 'http://localhost'

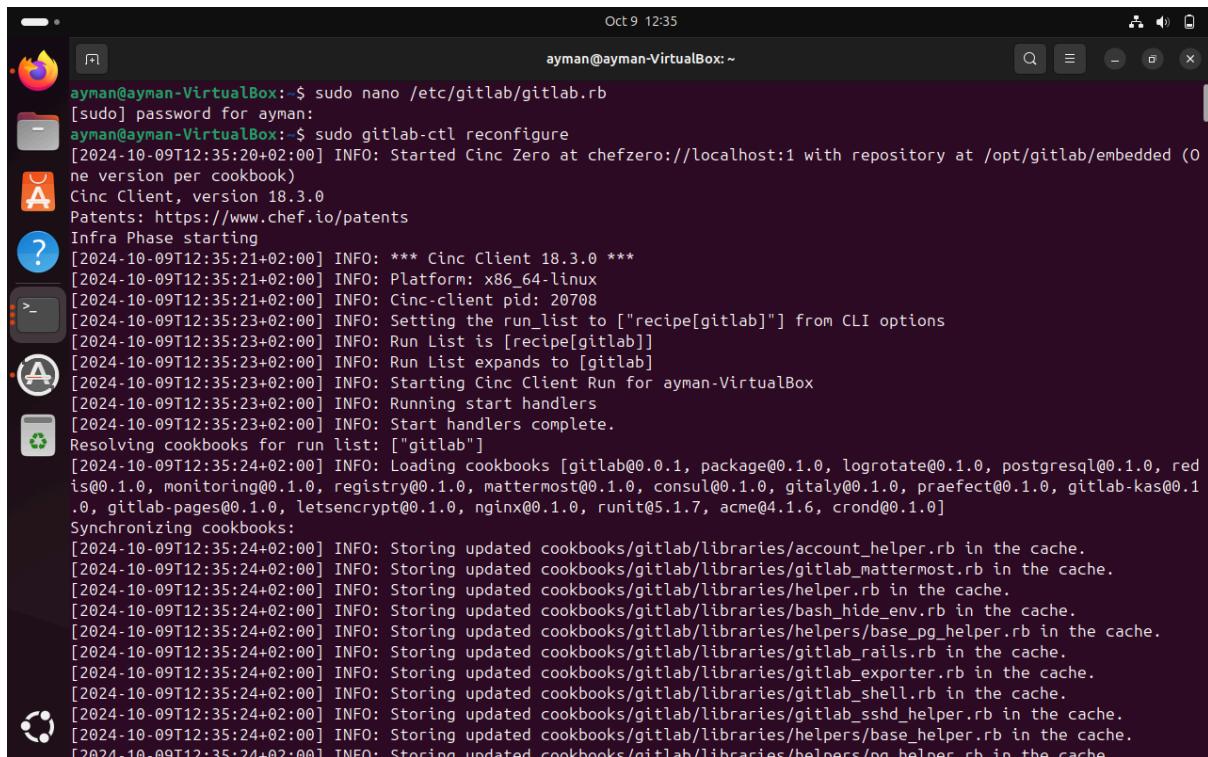
## Roles for multi-instance GitLab
##! The default is to have no roles enabled, which results in GitLab running as an all-in-one instance.
##! Options:
##!   redis_sentinel_role redis_master_role redis_replica_role geo_primary_role geo_secondary_role
##!   postgres_role consul_role application_role monitoring_role
##! For more details on each role, see:
##! https://docs.gitlab.com/omnibus/roles/index.html#roles
##!

# roles ['redis_sentinel_role', 'redis_master_role']

## Legend
##! The following notations at the beginning of each line may be used to
```

At the bottom of the terminal window, there is a menu bar with various keyboard shortcuts for navigating the nano editor.

## Lancement de service de configuration de Gitlab :



The screenshot shows a terminal window titled "ayman@ayman-VirtualBox:~". The command being run is "sudo gitlab-ctl reconfigure". The output of the command is as follows:

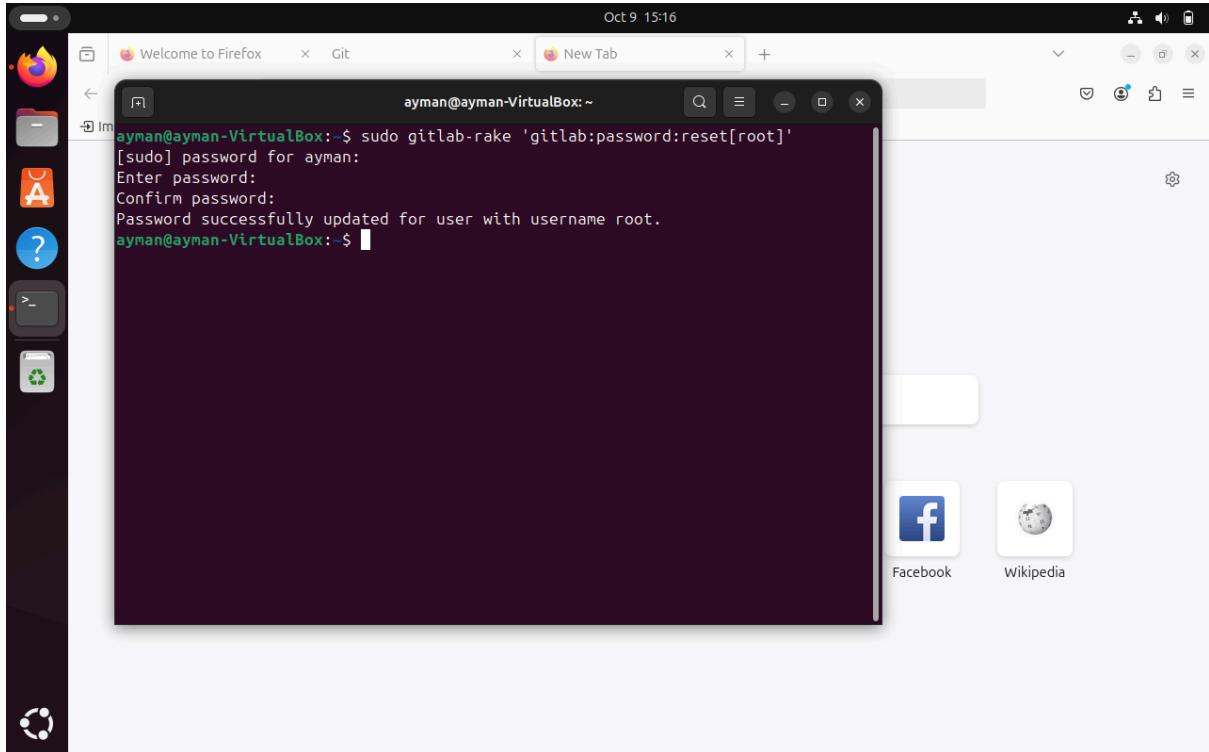
```
ayman@ayman-VirtualBox:~$ sudo nano /etc/gitlab/gitlab.rb
[sudo] password for ayman:
ayman@ayman-VirtualBox:~$ sudo gitlab-ctl reconfigure
[2024-10-09T12:35:20+02:00] INFO: Started Cinc Zero at chefzero://localhost:1 with repository at /opt/gitlab/embedded (0
ne version per cookbook)
Cinc Client, version 18.3.0
Patents: https://www.chef.io/patents
Infra Phase starting
[2024-10-09T12:35:21+02:00] INFO: *** Cinc Client 18.3.0 ***
[2024-10-09T12:35:21+02:00] INFO: Platform: x86_64-linux
[2024-10-09T12:35:21+02:00] INFO: Cinc-client pid: 20708
[2024-10-09T12:35:23+02:00] INFO: Setting the run_list to ["recipe[gitlab]"] from CLI options
[2024-10-09T12:35:23+02:00] INFO: Run List is [recipe[gitlab]]
[2024-10-09T12:35:23+02:00] INFO: Run List expands to [gitlab]
[2024-10-09T12:35:23+02:00] INFO: Starting Cinc Client Run for ayman-VirtualBox
[2024-10-09T12:35:23+02:00] INFO: Running start handlers
[2024-10-09T12:35:23+02:00] INFO: Start handlers complete.
Resolving cookbooks for run list: ["gitlab"]
[2024-10-09T12:35:24+02:00] INFO: Loading cookbooks [gitlab@0.0.1, package@0.1.0, logrotate@0.1.0, postgresql@0.1.0, red
is@0.1.0, monitoring@0.1.0, registry@0.1.0, mattermost@0.1.0, consul@0.1.0, gitaly@0.1.0, praefect@0.1.0, gitlab-kas@0.1
.0, gitlab-pages@0.1.0, letsencrypt@0.1.0, nginx@0.1.0, runit@5.1.7, acme@4.1.6, crond@0.1.0]
Synchronizing cookbooks:
[2024-10-09T12:35:24+02:00] INFO: Storing updated cookbooks/gitlab/libraries/account_helper.rb in the cache.
[2024-10-09T12:35:24+02:00] INFO: Storing updated cookbooks/gitlab/libraries/gitlab_mattermost.rb in the cache.
[2024-10-09T12:35:24+02:00] INFO: Storing updated cookbooks/gitlab/libraries/helper.rb in the cache.
[2024-10-09T12:35:24+02:00] INFO: Storing updated cookbooks/gitlab/libraries/bash_hide_env.rb in the cache.
[2024-10-09T12:35:24+02:00] INFO: Storing updated cookbooks/gitlab/libraries/helpers/base_pg_helper.rb in the cache.
[2024-10-09T12:35:24+02:00] INFO: Storing updated cookbooks/gitlab/libraries/gitlab_rails.rb in the cache.
[2024-10-09T12:35:24+02:00] INFO: Storing updated cookbooks/gitlab/libraries/gitlab_exporter.rb in the cache.
[2024-10-09T12:35:24+02:00] INFO: Storing updated cookbooks/gitlab/libraries/gitlab_shell.rb in the cache.
[2024-10-09T12:35:24+02:00] INFO: Storing updated cookbooks/gitlab/libraries/gitlab_sshd_helper.rb in the cache.
[2024-10-09T12:35:24+02:00] INFO: Storing updated cookbooks/gitlab/libraries/helpers/base_helper.rb in the cache.
[2024-10-09T12:35:24+02:00] INFO: Storing updated cookbooks/gitlab/libraries/helpers/no_helper.rb in the cache.
```

```
Oct 9 12:43 ayman@ayman-VirtualBox:~  
[2024-10-09T12:40:37+02:00] INFO: file[Prometheus config] sending run action to execute[reload prometheus] (delayed)  
  * execute[reload prometheus] action run[2024-10-09T12:40:38+02:00] INFO: execute[reload prometheus] ran successfully  
    - execute /opt/gitlab/bin/gitlab-ctl hup prometheus  
[2024-10-09T12:40:38+02:00] INFO: env_dir[/opt/gitlab/etc/alertmanager/env] sending restart action to runit_service[alertmanager] (delayed)  
Recipe: monitoring::alertmanager  
  * runit_service[alertmanager] action restart (up to date)  
[2024-10-09T12:40:39+02:00] INFO: env_dir[/opt/gitlab/etc/postgres-exporter/env] sending restart action to runit_service[postgres-exporter] (delayed)  
Recipe: monitoring::postgres-exporter  
  * runit_service[postgres-exporter] action restart (up to date)  
[2024-10-09T12:40:51+02:00] INFO: Cinc Client Run complete in 328.021549766 seconds  
  
• A Running handlers:  
[2024-10-09T12:40:51+02:00] INFO: Running report handlers  
Running handlers complete  
[2024-10-09T12:40:51+02:00] INFO: Report handlers complete  
Infra Phase complete, 579/1606 resources updated in 05 minutes 30 seconds  
  
Notes:  
Default admin account has been configured with following details:  
Username: root  
Password: You didn't opt-in to print initial root password to STDOUT.  
Password stored to /etc/gitlab/initial_root_password. This file will be cleaned up in first reconfigure run after 24 hours.  
  
NOTE: Because these credentials might be present in your log files in plain text, it is highly recommended to reset the password following https://docs.gitlab.com/ee/security/reset\_user\_password.html#reset-your-root-password.  
gitlab Reconfigured!  
ayman@ayman-VirtualBox:~$
```

Voilà le status est ok , mais j'ai pas fait une capture d'écran à la commande 'sudo gitlab-ctl start' :

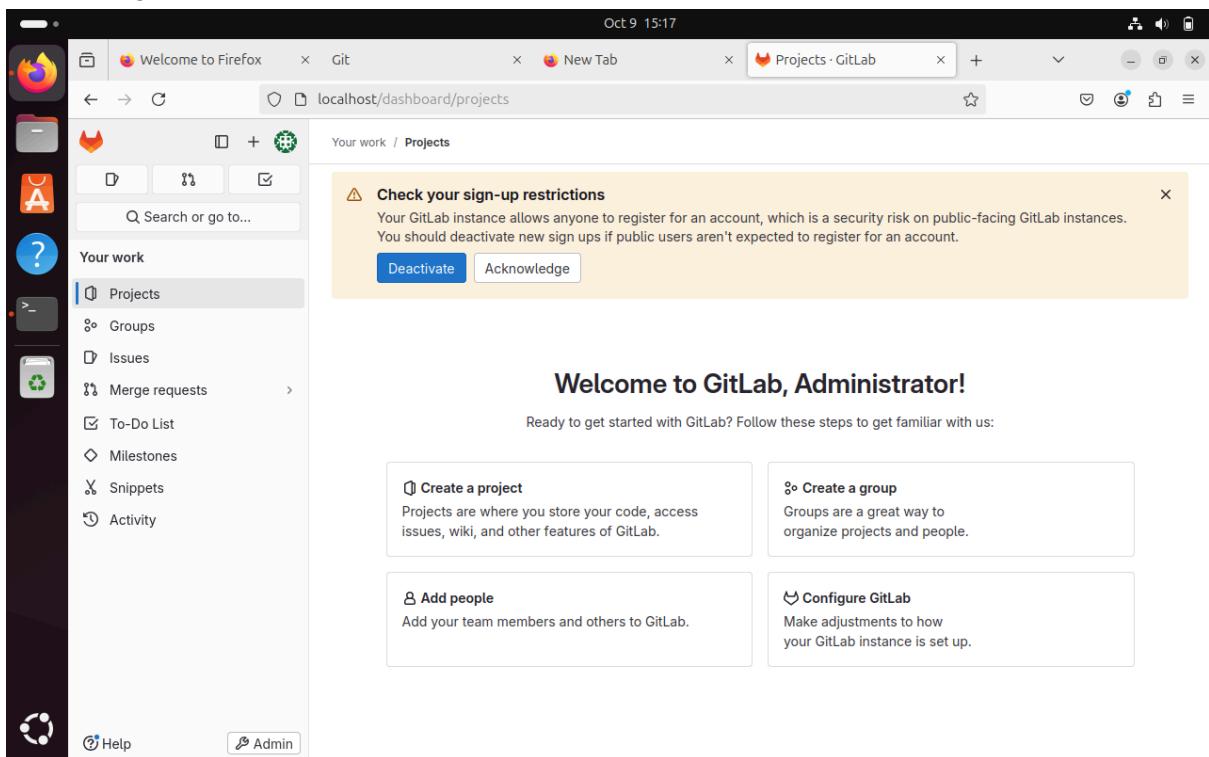
```
Oct 9 12:50 ayman@ayman-VirtualBox:~/Desktop  
ok: run: alertmanager: (pid 22413) 409s  
ok: run: gitaly: (pid 22391) 411s  
ok: run: gitlab-exporter: (pid 22382) 412s  
ok: run: gitlab-kas: (pid 21842) 665s  
ok: run: gitlab-workhorse: (pid 22352) 413s  
ok: run: logrotate: (pid 21535) 700s  
ok: run: nginx: (pid 22363) 413s  
ok: run: node-exporter: (pid 22373) 413s  
ok: run: postgres-exporter: (pid 22424) 408s  
ok: run: postgresql: (pid 21672) 676s  
ok: run: prometheus: (pid 22399) 411s  
ok: run: puma: (pid 21938) 547s  
ok: run: redis: (pid 21574) 694s  
ok: run: redis-exporter: (pid 22384) 411s  
ok: run: sidekiq: (pid 21958) 542s  
ayman@ayman-VirtualBox:~/Desktop$ sudo gitlab-ctl status  
run: alertmanager: (pid 22413) 421s; run: log: (pid 22215) 501s  
run: gitaly: (pid 22391) 423s; run: log: (pid 21625) 698s  
run: gitlab-exporter: (pid 22382) 424s; run: log: (pid 22107) 521s  
run: gitlab-kas: (pid 21842) 677s; run: log: (pid 21860) 674s  
run: gitlab-workhorse: (pid 22352) 425s; run: log: (pid 22028) 538s  
run: logrotate: (pid 21535) 712s; run: log: (pid 21543) 711s  
run: nginx: (pid 22363) 425s; run: log: (pid 22059) 531s  
run: node-exporter: (pid 22373) 425s; run: log: (pid 22098) 525s  
run: postgres-exporter: (pid 22424) 420s; run: log: (pid 22266) 495s  
run: postgresql: (pid 21672) 688s; run: log: (pid 21691) 685s  
run: prometheus: (pid 22399) 423s; run: log: (pid 22151) 509s  
run: puma: (pid 21938) 559s; run: log: (pid 21945) 558s  
run: redis: (pid 21574) 706s; run: log: (pid 21584) 705s  
run: redis-exporter: (pid 22384) 423s; run: log: (pid 22131) 515s  
run: sidekiq: (pid 21958) 553s; run: log: (pid 21975) 550s  
ayman@ayman-VirtualBox:~/Desktop$
```

Récupération du mot de passe par défaut du compte <>root<> :



```
ayman@ayman-VirtualBox:~$ sudo gitlab-rake 'gitlab:password:reset[root]'  
[sudo] password for ayman:  
Enter password:  
Confirm password:  
Password successfully updated for user with username root.  
ayman@ayman-VirtualBox:~$
```

Connection à l'application via 'localhost' , et après renseignement de login et mot de passe , voici la page qui a été présenté :



Welcome to GitLab, Administrator!

Ready to get started with GitLab? Follow these steps to get familiar with us:

- Create a project**  
Projects are where you store your code, access issues, wiki, and other features of GitLab.
- Create a group**  
Groups are a great way to organize projects and people.
- Add people**  
Add your team members and others to GitLab.
- Configure GitLab**  
Make adjustments to how your GitLab instance is set up.

## création d'une branch 'Ayman' , Intégration de projet workshop dans Gitlab :

```
ayman@ayman-VirtualBox:~/Desktop/workshop
Writing objects: 100% (7/7), 574 bytes | 574.00 KiB/s, done.
Total 7 (delta 0), reused 0 (delta 0), pack-reused 0
remote: GitLab: You are not allowed to force push code to a protected branch on this project.
To http://localhost/root/workshop.git
 ! [remote rejected] main -> Ayman (pre-receive hook declined)
error: failed to push some refs to 'http://localhost/root/workshop.git'
ayman@ayman-VirtualBox:~/Desktop/workshop$ git checkout -b Ayman
Switched to a new branch 'Ayman'
ayman@ayman-VirtualBox:~/Desktop/workshop$ git push -u origin Ayman --force
Username for 'http://localhost': root
Password for 'http://root@localhost':
Enumerating objects: 7, done.
Counting objects: 100% (7/7), done.
Delta compression using up to 2 threads
Compressing objects: 100% (4/4), done.
Writing objects: 100% (7/7), 574 bytes | 95.00 KiB/s, done.
Total 7 (delta 0), reused 0 (delta 0), pack-reused 0
remote: To create a merge request for Ayman, visit:
remote:   http://localhost/root/workshop/-/merge_requests/new?merge_request%5Bsource_branch%5D=Ayman
remote:
To http://localhost/root/workshop.git
* [new branch]      Ayman -> Ayman
branch 'Ayman' set up to track 'origin/Ayman'.
Tag ayman@ayman-VirtualBox:~/Desktop/workshop$
```

The screenshot shows the GitLab web interface with the following details:

- Project:** workshop / Repository
- Message:** The file has been successfully deleted.
- Message:** You pushed to Ayman just now. (with a "Create merge request" button)
- File List:** Delete index.html.save (Administrator authored just now, commit c462145d)
- Table:** A list of files in the repository:

Name	Last commit	Last update
index.html	Seconde version	27 minutes ago

## Installation de la jdk , et l'ajout de la clé au repository :

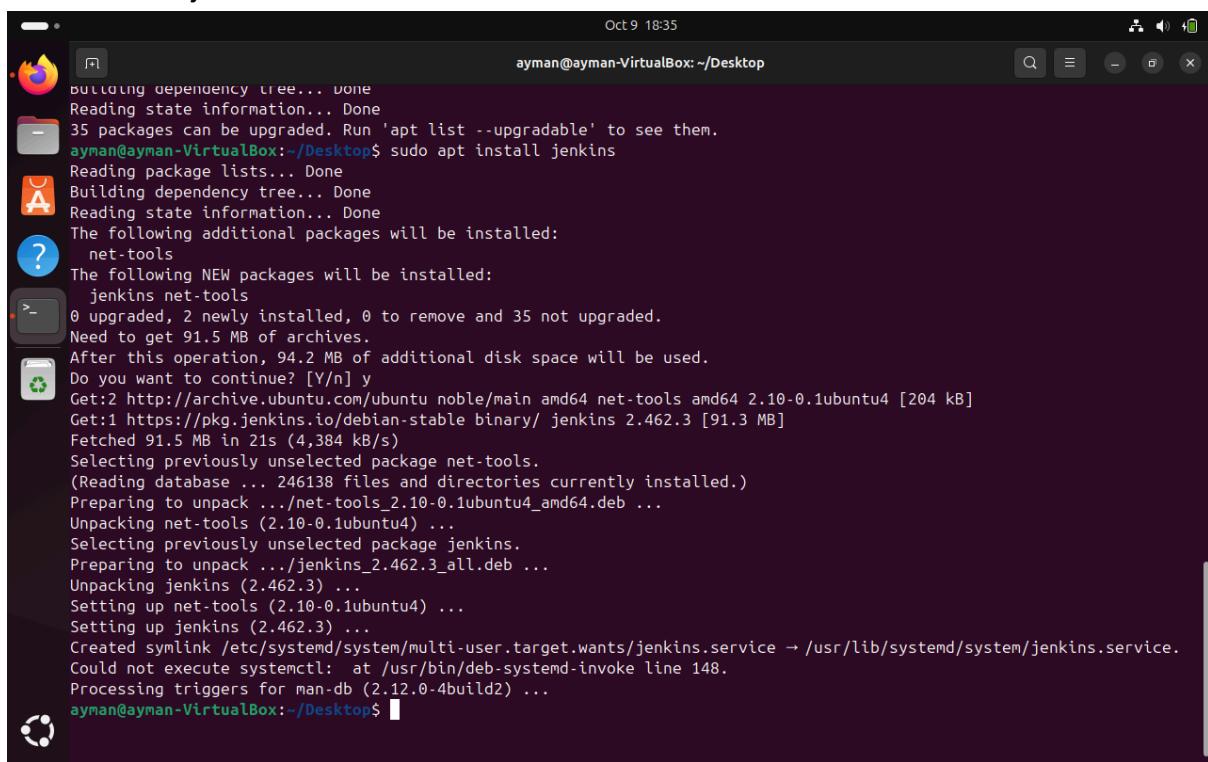
```
ayman@ayman-VirtualBox:~/Desktop$ sudo apt update
[sudo] password for ayman:
Sorry, try again.
[sudo] password for ayman:
Warning: The unit file, source configuration file or drop-ins of apt-news.service changed on disk. Run 'systemctl daemon-reload' to reload units.
Warning: The unit file, source configuration file or drop-ins of esm-cache.service changed on disk. Run 'systemctl daemon-reload' to reload units.
Hit:1 http://archive.ubuntu.com/ubuntu noble InRelease
Get:2 http://archive.ubuntu.com/ubuntu noble-updates InRelease [126 kB]
Get:3 http://security.ubuntu.com/ubuntu noble-security InRelease [126 kB]
Hit:4 http://archive.ubuntu.com/ubuntu noble-backports InRelease
Get:6 http://archive.ubuntu.com/ubuntu noble-updates/main amd64 Packages [539 kB]
Hit:5 https://packages.gitlab.com/gitlab/gitlab-ce/ubuntu noble InRelease
Get:7 http://archive.ubuntu.com/ubuntu noble-updates/universe amd64 Packages [384 kB]
Get:8 http://security.ubuntu.com/ubuntu noble-security/main amd64 Packages [383 kB]
Get:9 http://security.ubuntu.com/ubuntu noble-security/main Translation-en [84.3 kB]
Get:10 http://security.ubuntu.com/ubuntu noble-security/universe amd64 Packages [277 kB]
Get:11 http://security.ubuntu.com/ubuntu noble-security/universe Translation-en [117 kB]
Fetched 2,037 kB in 3s (803 kB/s)
Reading package lists... Done
Building dependency tree... Done
Reading state information... Done
35 packages can be upgraded. Run 'apt list --upgradable' to see them.
ayman@ayman-VirtualBox:~/Desktop$ sudo apt install default-jdk-y
Reading package lists... Done
Building dependency tree... Done
Reading state information... Done
E: Unable to locate package default-jdk-y
ayman@ayman-VirtualBox:~/Desktop$ curl -fsSL https://pkg.jenkins.io/debian-stable/jenkins.io-2023.key | sudo tee /usr/share/keyrings/jenkins-keyring.asc > /dev/null
ayman@ayman-VirtualBox:~/Desktop$
```

## Ajout de l'adresse des dépôts dans la source.list :

```
ayman@ayman-VirtualBox:~/Desktop$ sudo apt update
[sudo] password for ayman:
Warning: The unit file, source configuration file or drop-ins of apt-news.service changed on disk. Run 'systemctl daemon-reload' to reload units.
Warning: The unit file, source configuration file or drop-ins of esm-cache.service changed on disk. Run 'systemctl daemon-reload' to reload units.
Hit:1 http://archive.ubuntu.com/ubuntu noble InRelease
Get:2 http://archive.ubuntu.com/ubuntu noble-updates InRelease [126 kB]
Get:3 http://security.ubuntu.com/ubuntu noble-security InRelease [126 kB]
Hit:4 http://archive.ubuntu.com/ubuntu noble-backports InRelease
Get:6 http://archive.ubuntu.com/ubuntu noble-updates/main amd64 Packages [539 kB]
Hit:5 https://packages.gitlab.com/gitlab/gitlab-ce/ubuntu noble InRelease
Get:7 http://archive.ubuntu.com/ubuntu noble-updates/universe amd64 Packages [384 kB]
Get:8 http://security.ubuntu.com/ubuntu noble-security/main amd64 Packages [383 kB]
Get:9 http://security.ubuntu.com/ubuntu noble-security/main Translation-en [84.3 kB]
Get:10 http://security.ubuntu.com/ubuntu noble-security/universe amd64 Packages [277 kB]
Get:11 http://security.ubuntu.com/ubuntu noble-security/universe Translation-en [117 kB]
Fetched 2,037 kB in 3s (803 kB/s)
Reading package lists... Done
Building dependency tree... Done
Reading state information... Done
35 packages can be upgraded. Run 'apt list --upgradable' to see them.
ayman@ayman-VirtualBox:~/Desktop$ sudo apt install default-jdk-y
Reading package lists... Done
Building dependency tree... Done
Reading state information... Done
E: Unable to locate package default-jdk-y
ayman@ayman-VirtualBox:~/Desktop$ curl -fsSL https://pkg.jenkins.io/debian-stable/jenkins.io-2023.key | sudo tee /usr/share/keyrings/jenkins-keyring.asc > /dev/null
ayman@ayman-VirtualBox:~/Desktop$ echo deb [signed-by=/usr/share/keyrings/jenkins-keyring.asc] http://pkg.jenkins.io/debian-stable binary/ | sudo tee/etc/apt/sources.list.d/jenkins.list > /dev/null
sudo: tee/etc/apt/sources.list.d/jenkins.list: command not found
ayman@ayman-VirtualBox:~/Desktop$
```

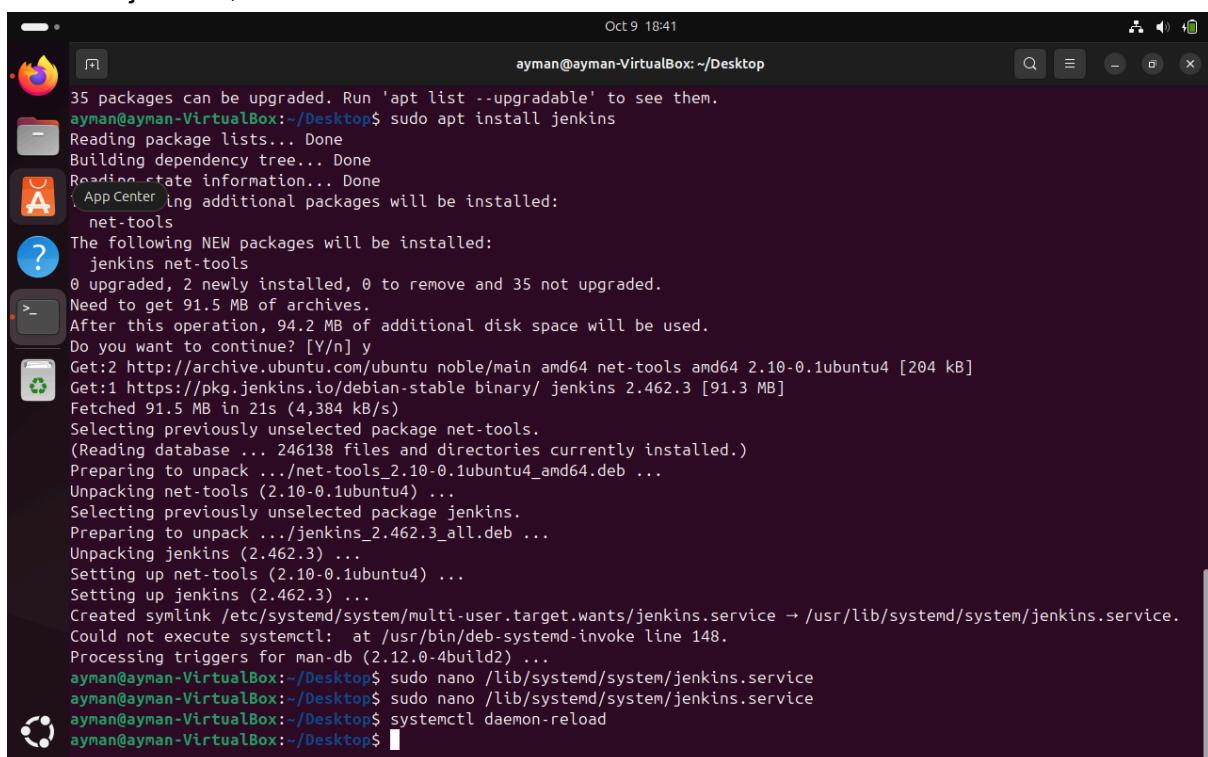
j'ai oublié de faire une capture d'écran à la commande 'sudo apt update' .

Installation de jenkins:



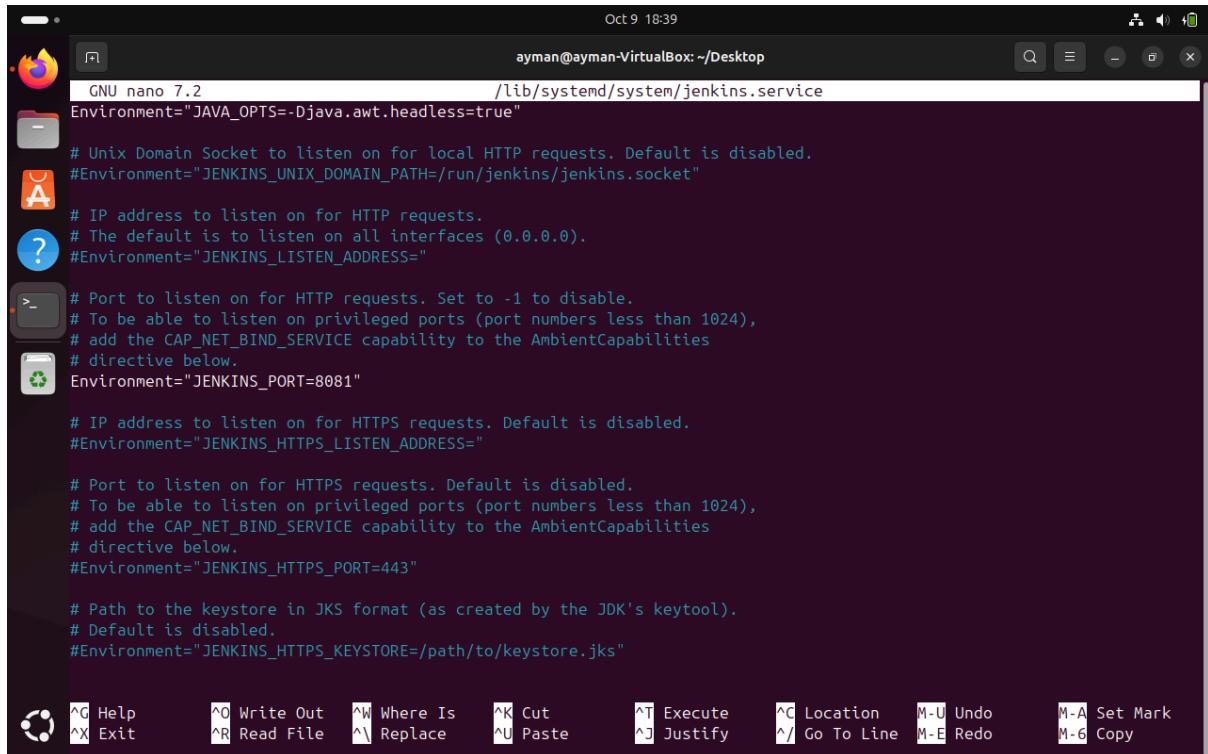
```
Oct 9 18:35
ayman@ayman-VirtualBox: ~/Desktop
Building dependency tree... done
Reading state information... Done
35 packages can be upgraded. Run 'apt list --upgradable' to see them.
ayman@ayman-VirtualBox:~/Desktop$ sudo apt install jenkins
Reading package lists... Done
Building dependency tree... Done
Reading state information... Done
The following additional packages will be installed:
  net-tools
The following NEW packages will be installed:
  jenkins net-tools
0 upgraded, 2 newly installed, 0 to remove and 35 not upgraded.
Need to get 91.5 MB of archives.
After this operation, 94.2 MB of additional disk space will be used.
Do you want to continue? [Y/n] y
Get:2 http://archive.ubuntu.com/ubuntu noble/main amd64 net-tools amd64 2.10-0.1ubuntu4 [204 kB]
Get:1 https://pkg.jenkins.io/debian-stable binary/ jenkins 2.462.3 [91.3 MB]
Fetched 91.5 MB in 21s (4,384 kB/s)
Selecting previously unselected package net-tools.
(Reading database ... 246138 files and directories currently installed.)
Preparing to unpack .../net-tools_2.10-0.1ubuntu4_amd64.deb ...
Unpacking net-tools (2.10-0.1ubuntu4) ...
Selecting previously unselected package jenkins.
Preparing to unpack .../jenkins_2.462.3_all.deb ...
Unpacking jenkins (2.462.3) ...
Setting up net-tools (2.10-0.1ubuntu4) ...
Setting up jenkins (2.462.3) ...
Created symlink /etc/systemd/system/multi-user.target.wants/jenkins.service → /usr/lib/systemd/system/jenkins.service.
Could not execute systemctl: at /usr/bin/deb-systemd-invoke line 148.
Processing triggers for man-db (2.12.0-4build2) ...
ayman@ayman-VirtualBox:~/Desktop$
```

Exécution de la commande 'sudo nano /lib/systemd/system/jenkins.service' pour l'ouverture du fichier jenkins , et lancement de la deamon :



```
Oct 9 18:41
ayman@ayman-VirtualBox: ~/Desktop
35 packages can be upgraded. Run 'apt list --upgradable' to see them.
ayman@ayman-VirtualBox:~/Desktop$ sudo apt install jenkins
Reading package lists... Done
Building dependency tree... Done
Reading state information... Done
The following additional packages will be installed:
  net-tools
The following NEW packages will be installed:
  jenkins net-tools
0 upgraded, 2 newly installed, 0 to remove and 35 not upgraded.
Need to get 91.5 MB of archives.
After this operation, 94.2 MB of additional disk space will be used.
Do you want to continue? [Y/n] y
Get:2 http://archive.ubuntu.com/ubuntu noble/main amd64 net-tools amd64 2.10-0.1ubuntu4 [204 kB]
Get:1 https://pkg.jenkins.io/debian-stable binary/ jenkins 2.462.3 [91.3 MB]
Fetched 91.5 MB in 21s (4,384 kB/s)
Selecting previously unselected package net-tools.
(Reading database ... 246138 files and directories currently installed.)
Preparing to unpack .../net-tools_2.10-0.1ubuntu4_amd64.deb ...
Unpacking net-tools (2.10-0.1ubuntu4) ...
Selecting previously unselected package jenkins.
Preparing to unpack .../jenkins_2.462.3_all.deb ...
Unpacking jenkins (2.462.3) ...
Setting up net-tools (2.10-0.1ubuntu4) ...
Setting up jenkins (2.462.3) ...
Created symlink /etc/systemd/system/multi-user.target.wants/jenkins.service → /usr/lib/systemd/system/jenkins.service.
Could not execute systemctl: at /usr/bin/deb-systemd-invoke line 148.
Processing triggers for man-db (2.12.0-4build2) ...
ayman@ayman-VirtualBox:~/Desktop$ sudo nano /lib/systemd/system/jenkins.service
ayman@ayman-VirtualBox:~/Desktop$ sudo nano /lib/systemd/system/jenkins.service
ayman@ayman-VirtualBox:~/Desktop$ systemctl daemon-reload
ayman@ayman-VirtualBox:~/Desktop$
```

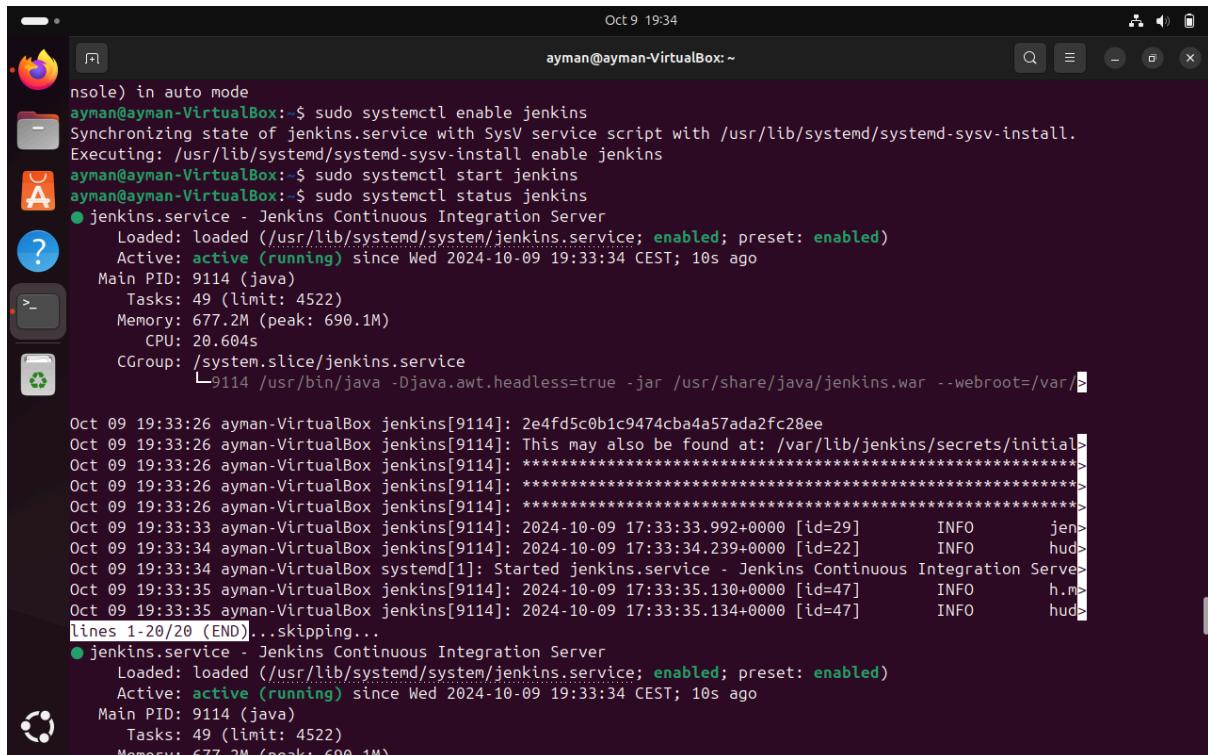
## Modification du fichier jenkins.service :



```
ayman@ayman-VirtualBox:~/Desktop
GNU nano 7.2
/lib/systemd/system/jenkins.service
Environment="JAVA_OPTS=-Djava.awt.headless=true"
# Unix Domain Socket to listen on for local HTTP requests. Default is disabled.
#Environment="JENKINS_UNIX_DOMAIN_PATH=/run/jenkins/jenkins.socket"
# IP address to listen on for HTTP requests.
# The default is to listen on all interfaces (0.0.0.0).
#Environment="JENKINS_LISTEN_ADDRESS="
# Port to listen on for HTTP requests. Set to -1 to disable.
# To be able to listen on privileged ports (port numbers less than 1024),
# add the CAP_NET_BIND_SERVICE capability to the AmbientCapabilities
# directive below.
#Environment="JENKINS_PORT=8081"
# IP address to listen on for HTTPS requests. Default is disabled.
#Environment="JENKINS_HTTPS_LISTEN_ADDRESS="
# Port to listen on for HTTPS requests. Default is disabled.
# To be able to listen on privileged ports (port numbers less than 1024),
# add the CAP_NET_BIND_SERVICE capability to the AmbientCapabilities
# directive below.
#Environment="JENKINS_HTTPS_PORT=443"
# Path to the keystore in JKS format (as created by the JDK's keytool).
# Default is disabled.
#Environment="JENKINS_HTTPS_KEYSTORE=/path/to/keystore.jks"

^G Help      ^O Write Out   ^W Where Is    ^K Cut        ^T Execute     ^C Location    M-U Undo
^X Exit      ^R Read File   ^Y Replace     ^U Paste       ^J Justify     ^I Go To Line  M-E Redo
M-A Set Mark M-6 Copy
```

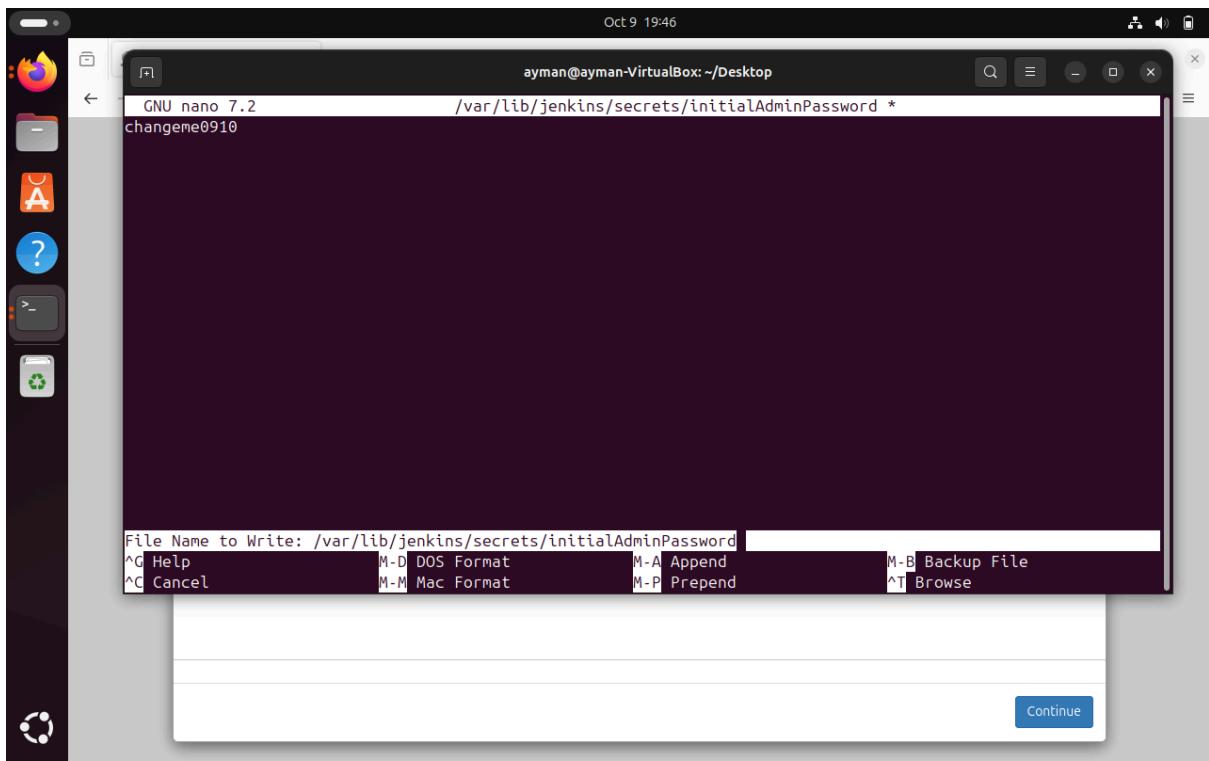
## Démarrage de jenkins , et vérification du statut de jenkins :



```
ayman@ayman-VirtualBox:~$ sudo systemctl enable jenkins
Synchronizing state of jenkins.service with SysV service script with /usr/lib/systemd/systemd-sysv-install.
Executing: /usr/lib/systemd/systemd-sysv-install enable jenkins
ayman@ayman-VirtualBox:~$ sudo systemctl start jenkins
ayman@ayman-VirtualBox:~$ sudo systemctl status jenkins
● jenkins.service - Jenkins Continuous Integration Server
   Loaded: loaded (/usr/lib/systemd/system/jenkins.service; enabled; preset: enabled)
   Active: active (running) since Wed 2024-10-09 19:33:34 CEST; 10s ago
     Main PID: 9114 (java)
        Tasks: 49 (limit: 4522)
       Memory: 677.2M (peak: 690.1M)
          CPU: 20.604s
         CGroup: /system.slice/jenkins.service
                 └─9114 /usr/bin/java -Djava.awt.headless=true -jar /usr/share/java/jenkins.war --webroot=/var/...

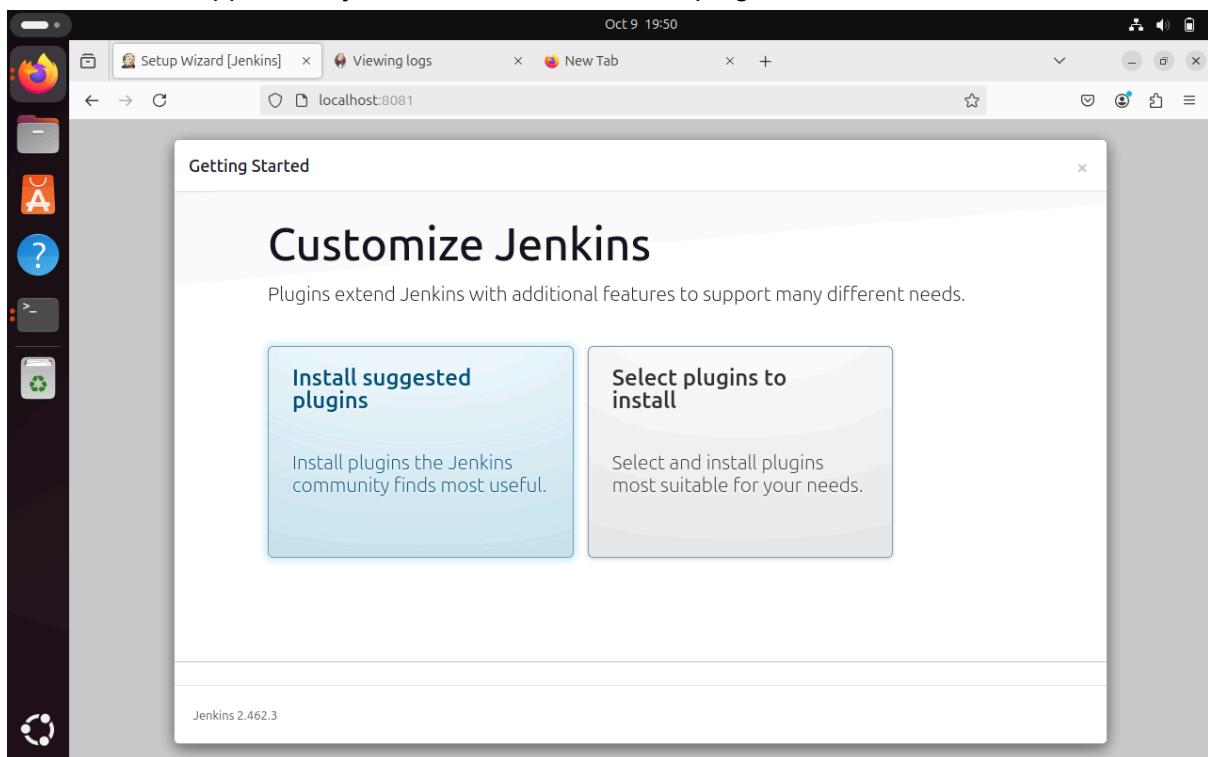
Oct 09 19:33:26 ayman-VirtualBox jenkins[9114]: 2e4fd5c0b1c9474cba4a57ada2fc28ee
Oct 09 19:33:26 ayman-VirtualBox jenkins[9114]: This may also be found at: /var/lib/jenkins/secrets/initialAdminPassword
Oct 09 19:33:26 ayman-VirtualBox jenkins[9114]: ****
Oct 09 19:33:26 ayman-VirtualBox jenkins[9114]: ****
Oct 09 19:33:26 ayman-VirtualBox jenkins[9114]: ****
Oct 09 19:33:33 ayman-VirtualBox jenkins[9114]: 2024-10-09 17:33:33.992+0000 [id=29]           INFO      jen
Oct 09 19:33:34 ayman-VirtualBox jenkins[9114]: 2024-10-09 17:33:34.239+0000 [id=22]           INFO      hud
Oct 09 19:33:34 ayman-VirtualBox systemd[1]: Started jenkins.service - Jenkins Continuous Integration Serve
Oct 09 19:33:35 ayman-VirtualBox jenkins[9114]: 2024-10-09 17:33:35.130+0000 [id=47]           INFO      h.m
Oct 09 19:33:35 ayman-VirtualBox jenkins[9114]: 2024-10-09 17:33:35.134+0000 [id=47]           INFO      hud
lines 1-20/20 (END)...skipping...
● jenkins.service - Jenkins Continuous Integration Server
   Loaded: loaded (/usr/lib/systemd/system/jenkins.service; enabled; preset: enabled)
   Active: active (running) since Wed 2024-10-09 19:33:34 CEST; 10s ago
     Main PID: 9114 (java)
        Tasks: 49 (limit: 4522)
       Memory: 677.2M (peak: 690.1M)
```

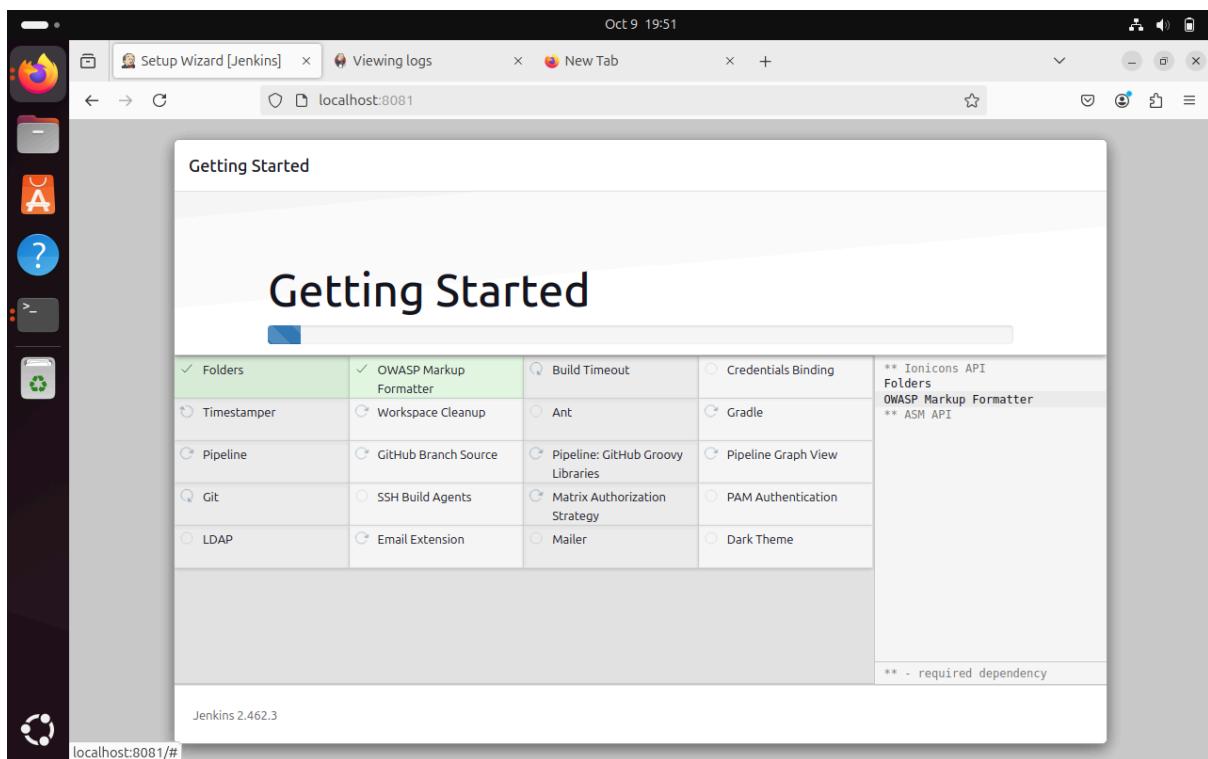
Récupération et changement du mot de passe , pour changer le mot de passe j'ai utiliser cette commande `sudo nano /var/lib/jenkins/secrets/initialAdminPassword` :



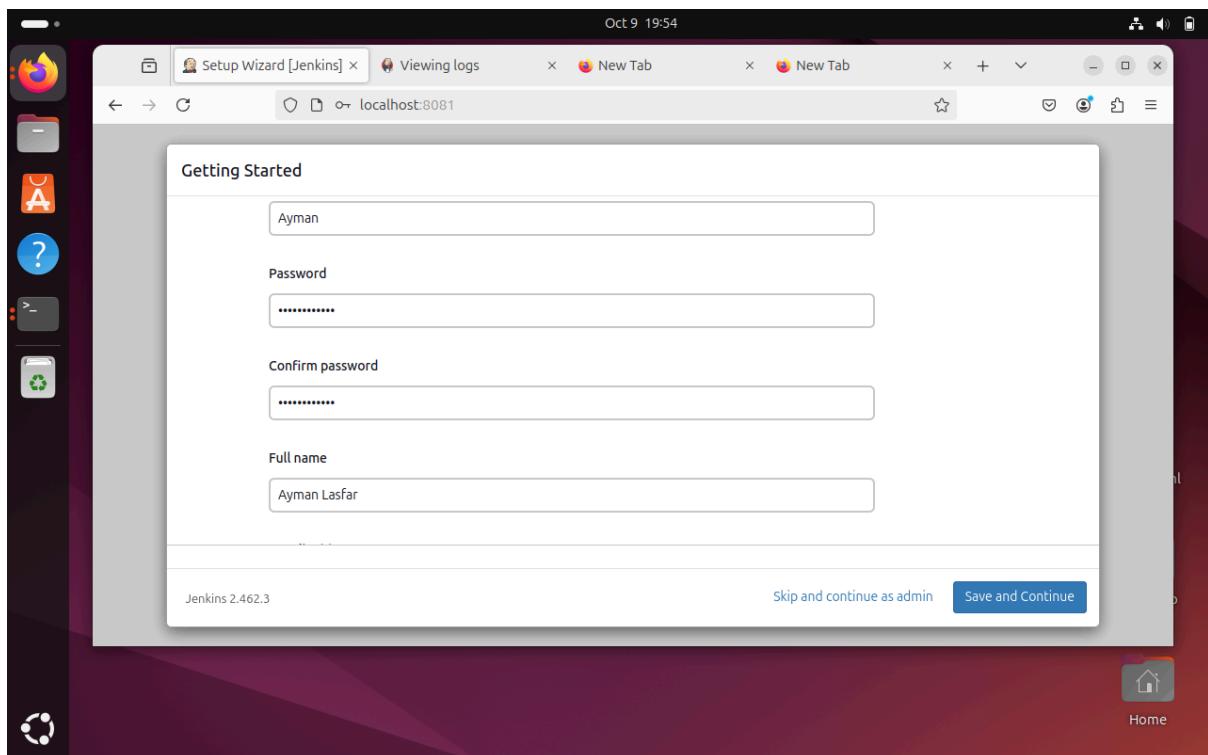
A screenshot of a terminal window titled "ayman@ayman-VirtualBox: ~/Desktop". The command entered is `sudo nano /var/lib/jenkins/secrets/initialAdminPassword`. The file is open in nano editor with the content "changeme0910". The terminal interface includes a menu bar at the top and a status bar at the bottom. A modal dialog box is overlaid on the terminal, prompting for a file name to write, with the path `/var/lib/jenkins/secrets/initialAdminPassword` already filled in. The dialog also shows keyboard shortcuts for various actions like Help (^G), Cancel (^C), DOS Format (M-D), Mac Format (M-M), Append (M-A), Prepend (M-P), Backup File (M-B), and Browse (^T). A "Continue" button is visible at the bottom right of the dialog.

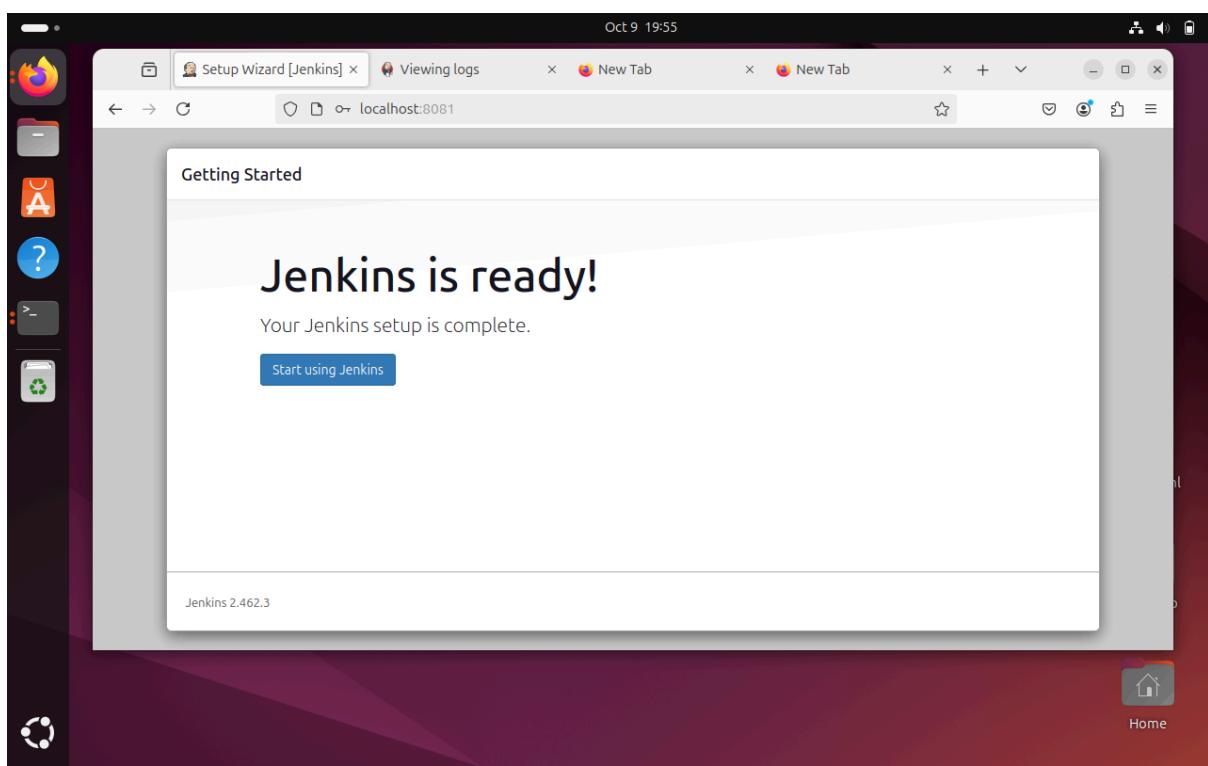
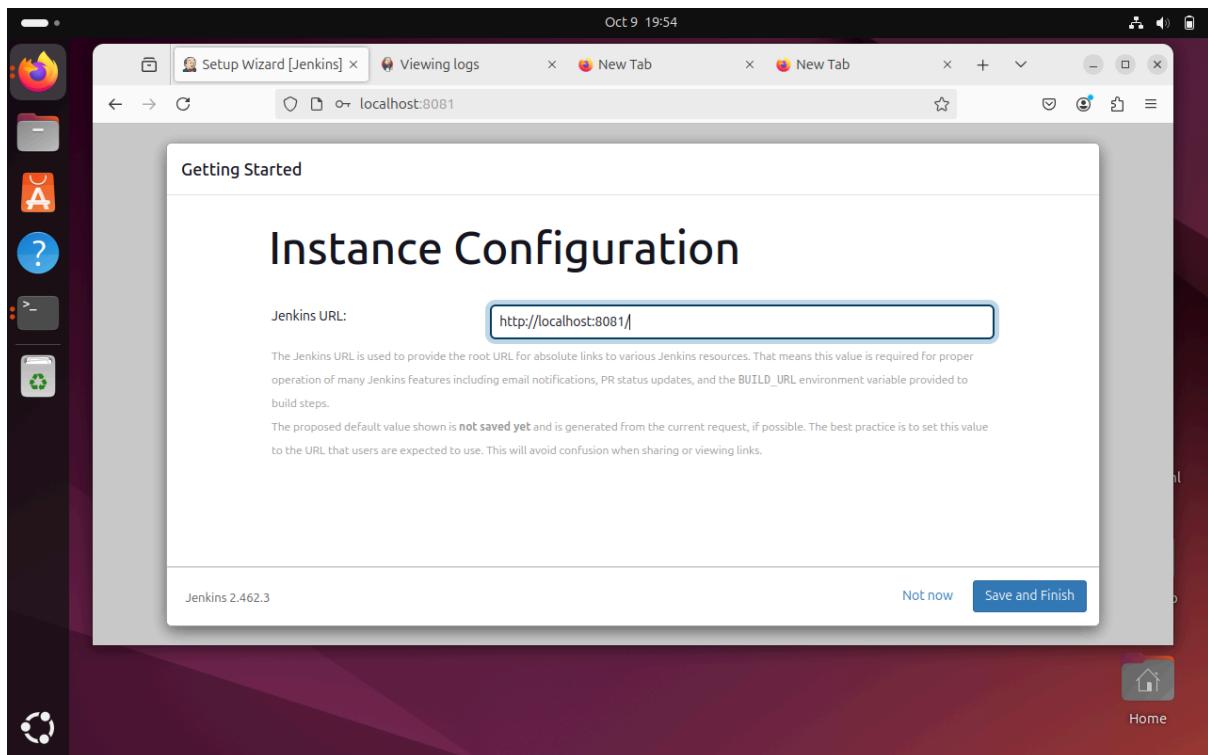
Connection à l'application jenkins , et installation des plugins:



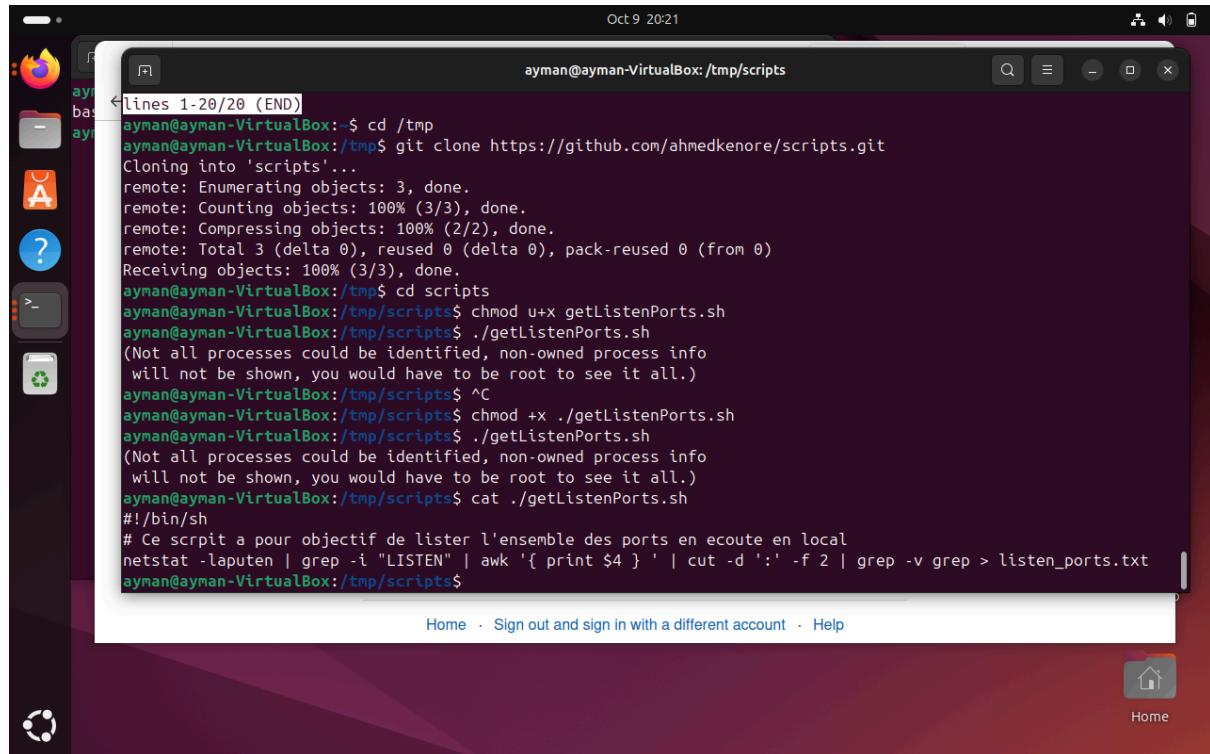


Réalisation des différentes configurations :



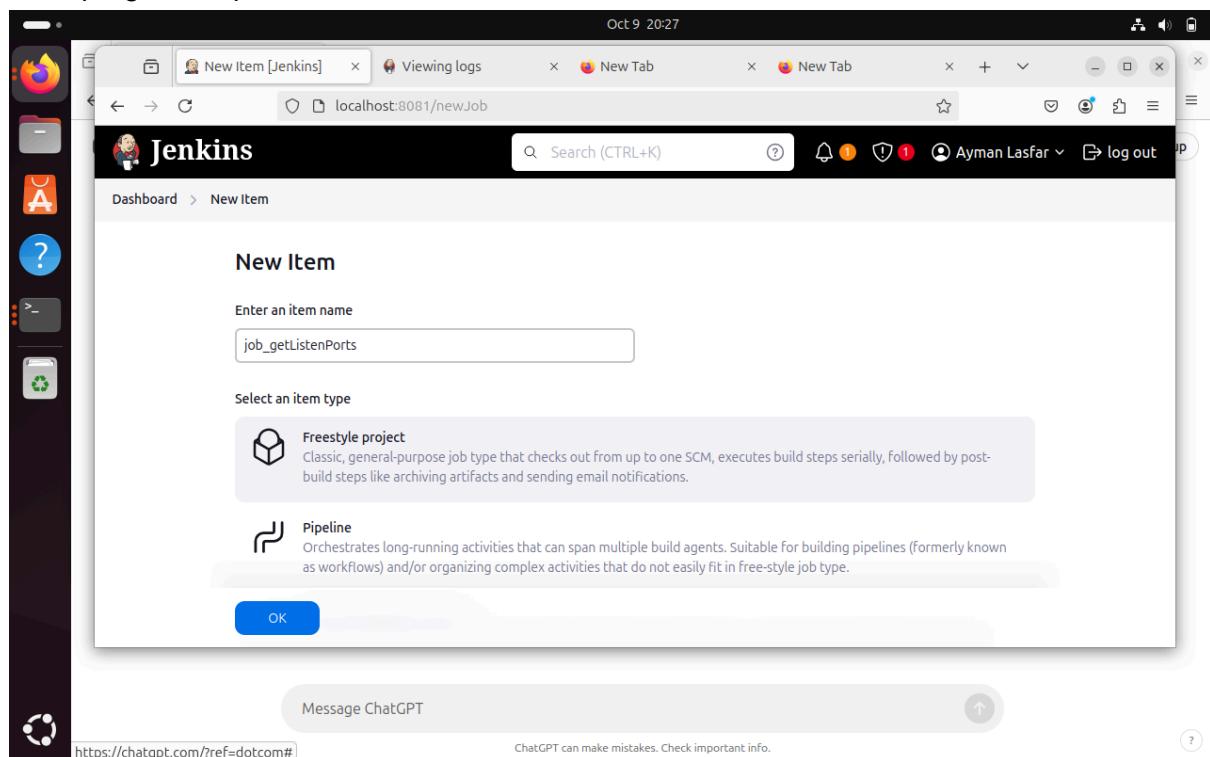


Récupération du script depuis github , rendre le script exécutable , et test du script en local :

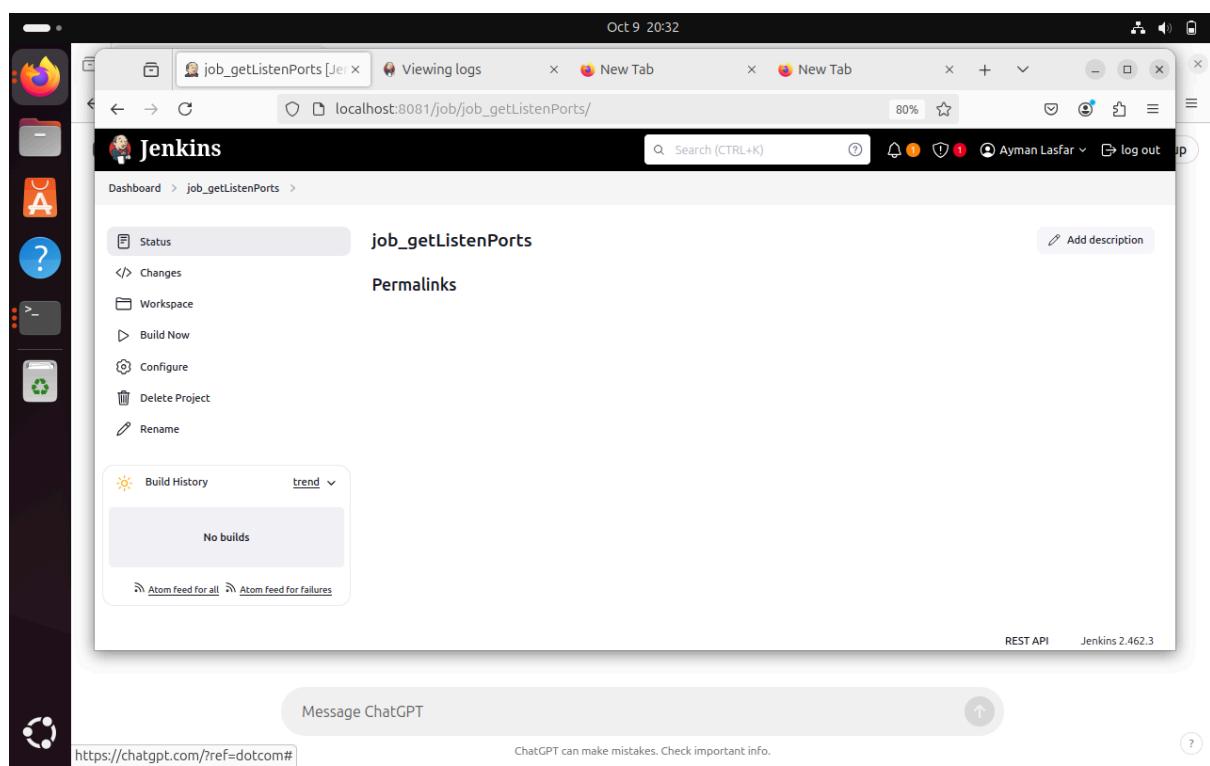
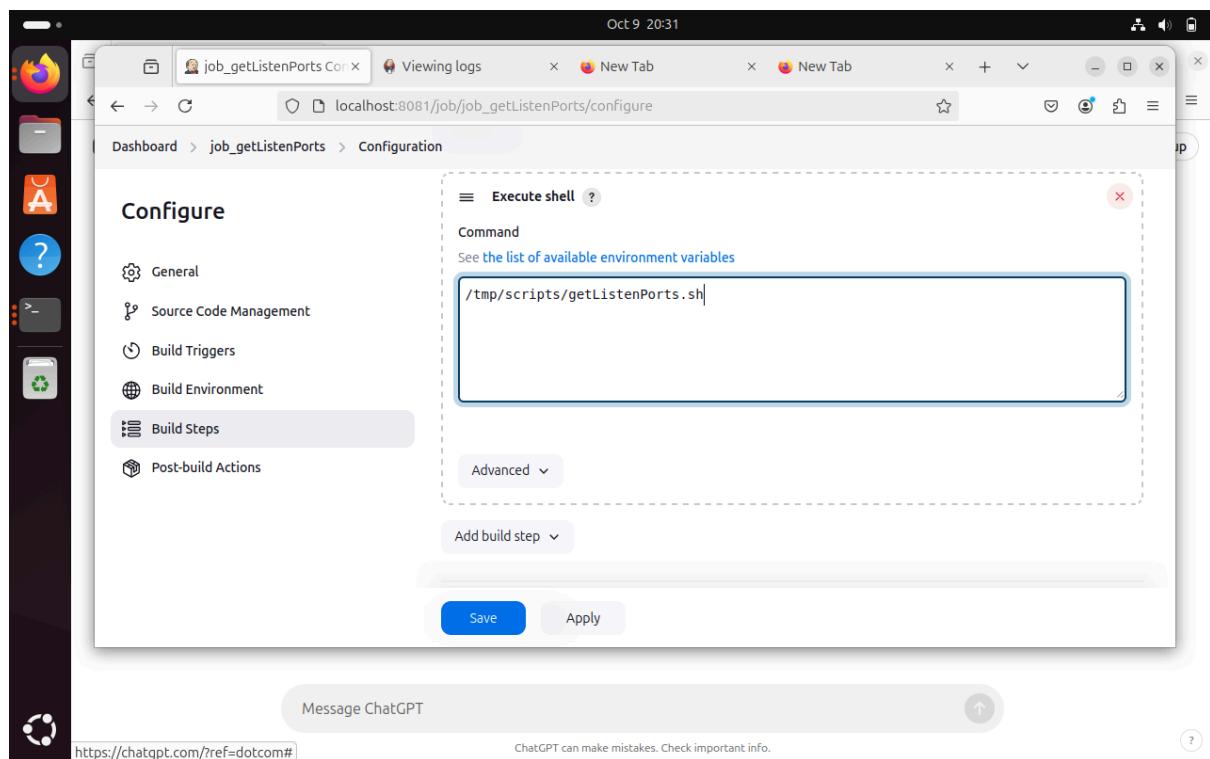


```
ayman@ayman-VirtualBox:~$ cd /tmp
ayman@ayman-VirtualBox:/tmp$ git clone https://github.com/ahmedkenore/scripts.git
Cloning into 'scripts'...
remote: Enumerating objects: 3, done.
remote: Counting objects: 100% (3/3), done.
remote: Compressing objects: 100% (2/2), done.
remote: Total 3 (delta 0), reused 0 (delta 0), pack-reused 0 (from 0)
Receiving objects: 100% (3/3), done.
ayman@ayman-VirtualBox:/tmp$ cd scripts
ayman@ayman-VirtualBox:/tmp/scripts$ chmod u+x getListenPorts.sh
ayman@ayman-VirtualBox:/tmp/scripts$ ./getListenPorts.sh
(Not all processes could be identified, non-owned process info
will not be shown, you would have to be root to see it all.)
ayman@ayman-VirtualBox:/tmp/scripts$ ^C
ayman@ayman-VirtualBox:/tmp/scripts$ chmod +x ./getListenPorts.sh
ayman@ayman-VirtualBox:/tmp/scripts$ ./getListenPorts.sh
(Not all processes could be identified, non-owned process info
will not be shown, you would have to be root to see it all.)
ayman@ayman-VirtualBox:/tmp/scripts$ cat ./getListenPorts.sh
#!/bin/sh
# Ce script a pour objectif de lister l'ensemble des ports en ecoute en local
netstat -laputnen | grep -i "LISTEN" | awk '{ print $4 }' | cut -d ':' -f 2 | grep -v grep > listen_ports.txt
ayman@ayman-VirtualBox:/tmp/scripts$
```

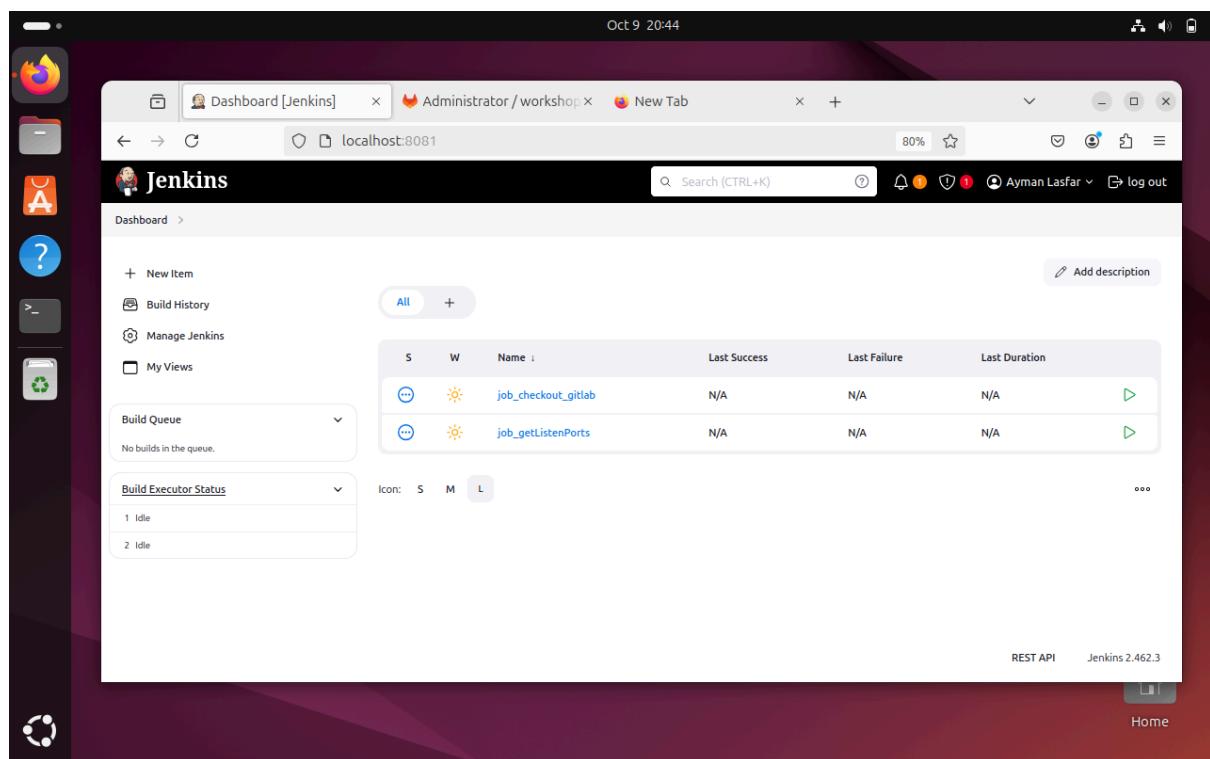
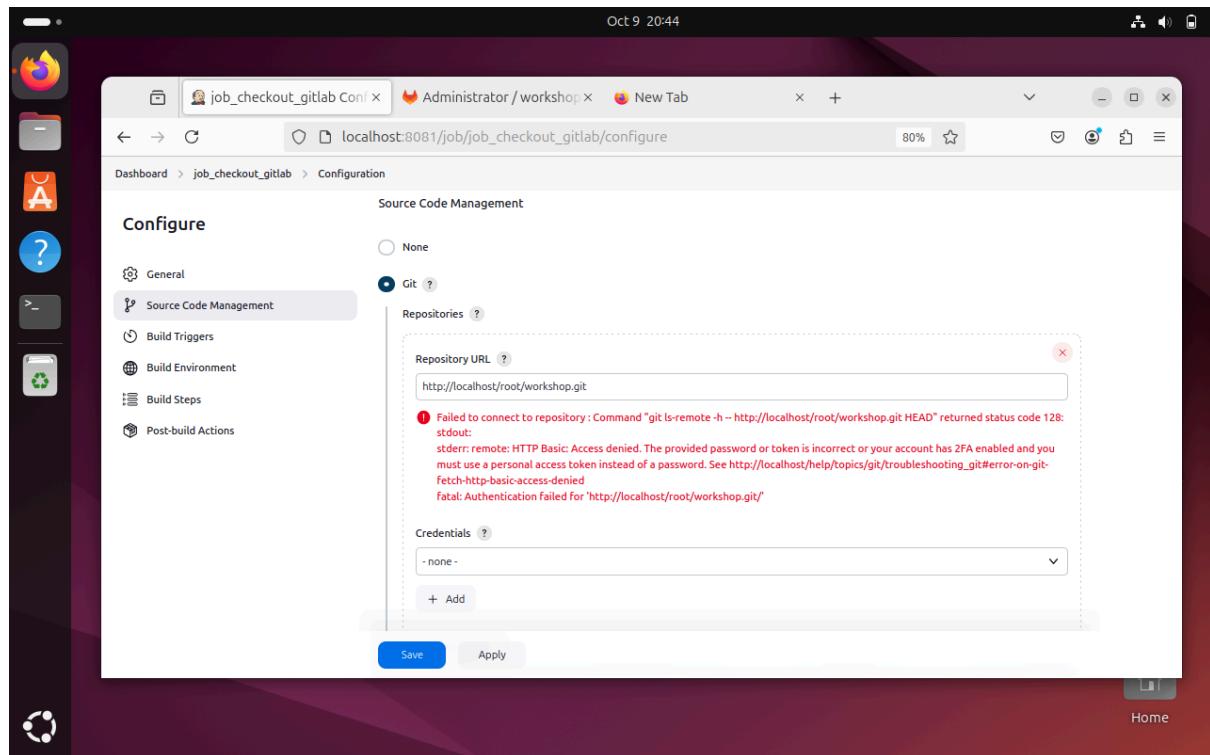
Création d'un job jenkins de type freestyle dont le libelle est "job\_getlistenports" qui execute le script "getlistenports.sh" :



The screenshot shows a browser window displaying the Jenkins interface. The URL is `localhost:8081/newJob`. The page title is "Jenkins". The main content is a "New Item" form. The "Item name" field contains "job\_getListenPorts". The "Select an item type" section shows two options: "Freestyle project" (selected) and "Pipeline". The "Freestyle project" description states: "Classic, general-purpose job type that checks out from up to one SCM, executes build steps serially, followed by post-build steps like archiving artifacts and sending email notifications." The "Pipeline" description states: "Orchestrates long-running activities that can span multiple build agents. Suitable for building pipelines (formerly known as workflows) and/or organizing complex activities that do not easily fit in free-style job type." At the bottom of the form is a blue "OK" button.



Création d'un job de type freestyle dont le libellé est "job checkout gitlab" qui exécute un checkout de workshop.git depuis gitlab :



**Fin de la réalisation du TP encadrée par Monsieur Ahmed KENORE**