DAY-2 JENKINS –GITHUB-DOCKER INSTALLATION SETUP

Step 1: Install Docker

- The document likely includes steps for **downloading and installing Docker** on a system (Linux, Windows, or Mac).

Step 2: Enable and Start Docker

- After installation, Docker needs to be **enabled and started** to run properly.
- Common commands for Linux:

sudo systemctl enable docker

sudo systemctl start docker

Step 3: Verify Installation

- After starting Docker, it's important to **check if the installation is successful**

Step 4: Additional Setup (GitHub Token Link)

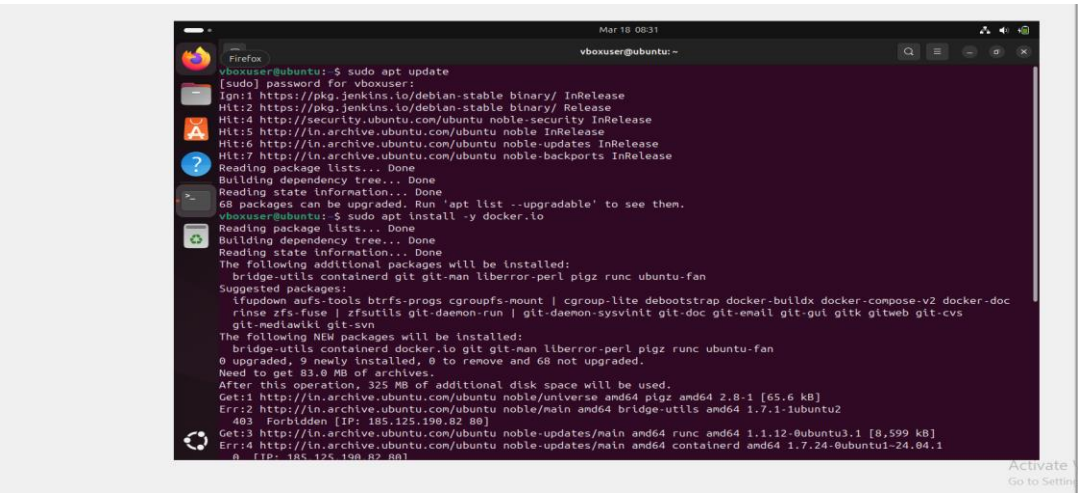
- The document contains a **GitHub token generation link**:
  GitHub Token Settings

- This suggests that authentication with GitHub (e.g., for Docker Hub access or private repositories) might be required.

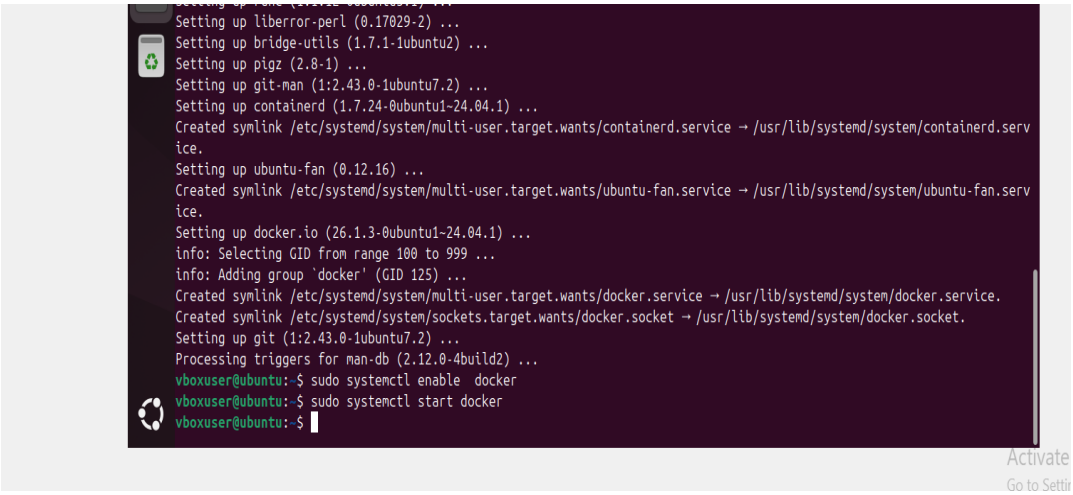
Step 5: Test Docker

- Run a test to ensure Docker is functioning correctly.
- If the test is successful, Docker will display a message confirming that it is installed and working properly.

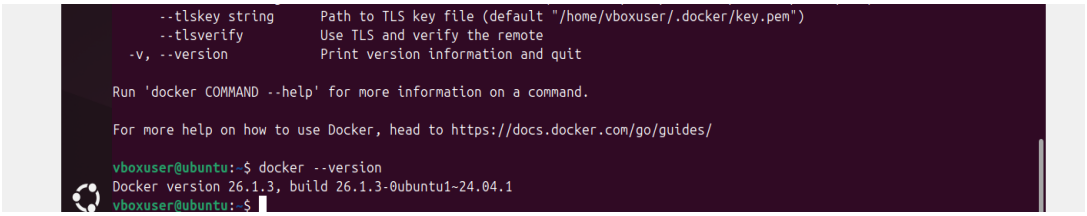
Step 1:Install Docker

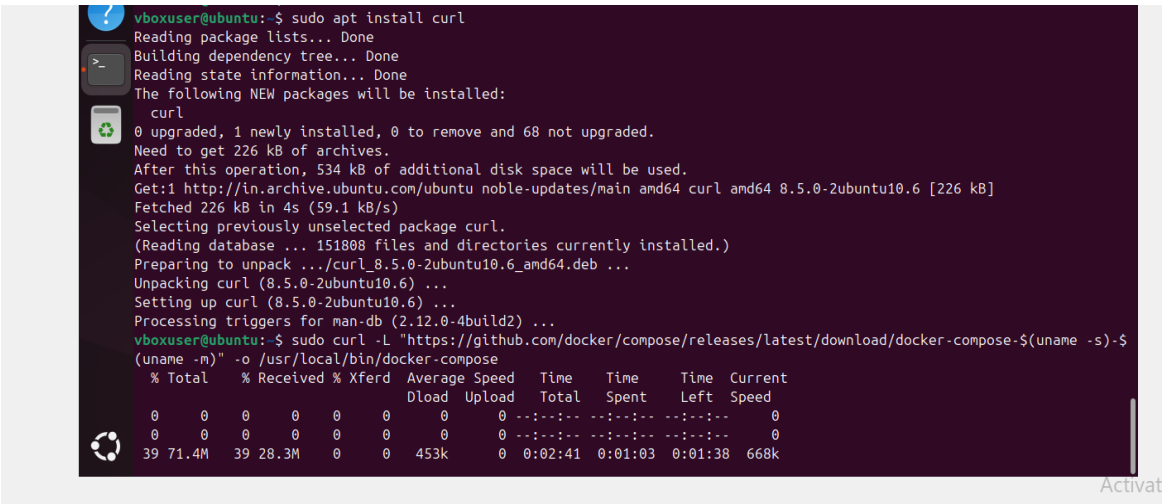


Enable and Start Docker



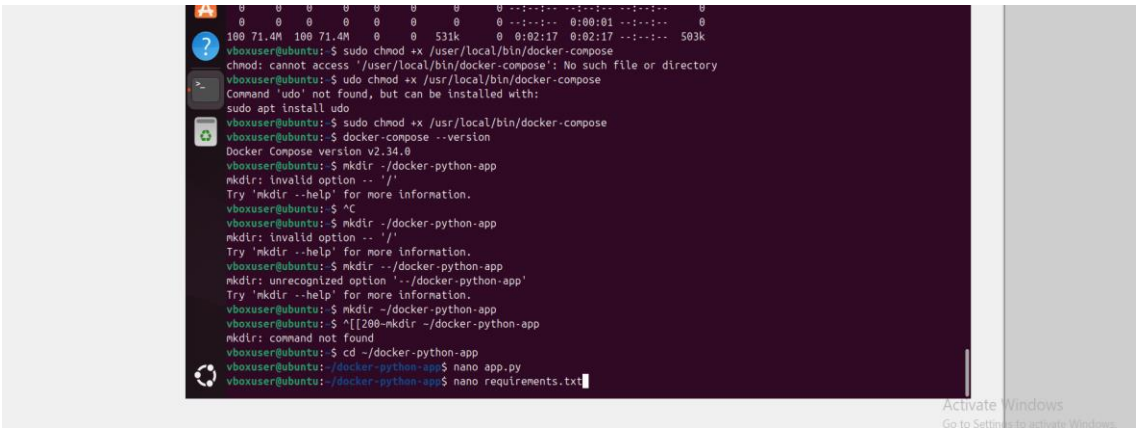
Verify Installation:





```
  % Total    % Received % Xferd  Average Speed   Time    Time     Time  Current
                                 Dload  Upload   Total   Spent    Left  Speed
  0     0    0     0    0     0      0      0 --:--:-- --:--:-- --:--:--     0
  0     0    0     0    0     0      0      0 --:--:--  0:00:01 --:--:--     0
100 71.4M  100 71.4M    0     0   531k      0  0:02:17  0:02:17 --:--:--  503k
vboxuser@ubuntu:~$ sudo chmod +x /user/local/bin/docker-compose
chmod: cannot access '/user/local/bin/docker-compose': No such file or directory
vboxuser@ubuntu:~$ udo chmod +x /usr/local/bin/docker-compose
Command 'udo' not found, but can be installed with:
sudo apt install udo
vboxuser@ubuntu:~$ sudo chmod +x /usr/local/bin/docker-compose
vboxuser@ubuntu:~$ docker-compose --version
Docker Compose version v2.34.0
vboxuser@ubuntu:~$
```

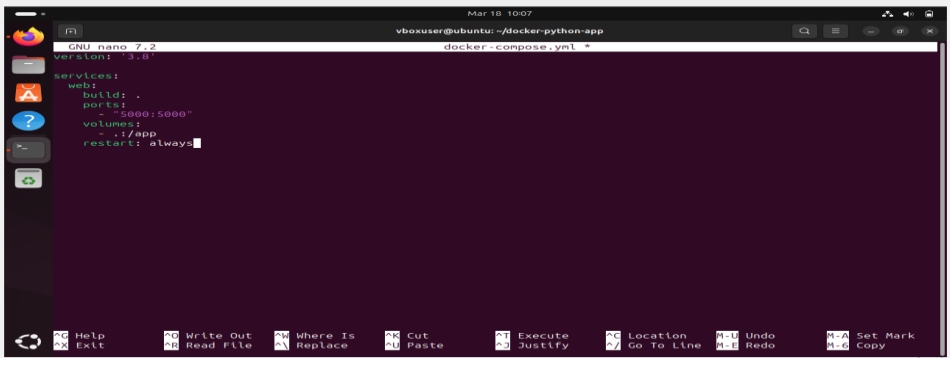
Activate V

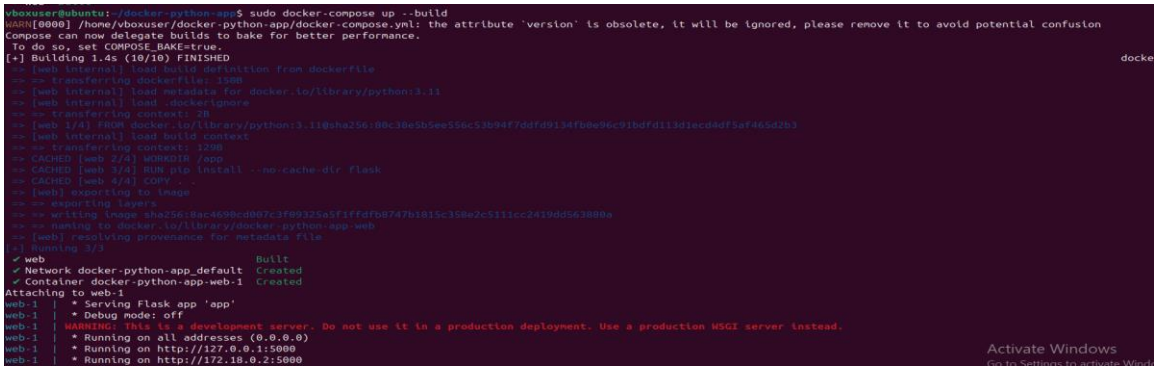


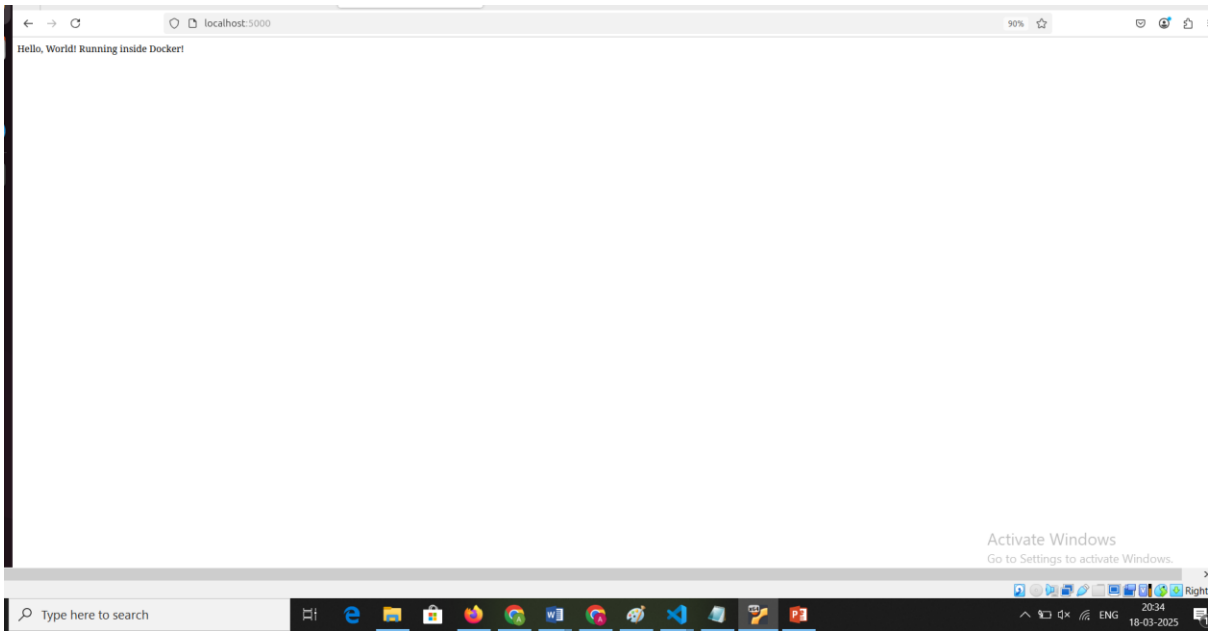
Activate Windows
Go to Settings to activate Windows.

```
Try 'mkdir --help' for more information.
vboxuser@ubuntu:~$ mkdir --/docker-python-app
mkdir: unrecognized option '--/docker-python-app'
Try 'mkdir --help' for more information.
vboxuser@ubuntu:~$ mkdir ~/docker-python-app
vboxuser@ubuntu:~$ ^[[200~mkdir ~/docker-python-app
mkdir: command not found
vboxuser@ubuntu:~$ cd ~/docker-python-app
vboxuser@ubuntu:~/docker-python-app$ nano app.py
vboxuser@ubuntu:~/docker-python-app$ nano requirements.txt
vboxuser@ubuntu:~/docker-python-app$
```

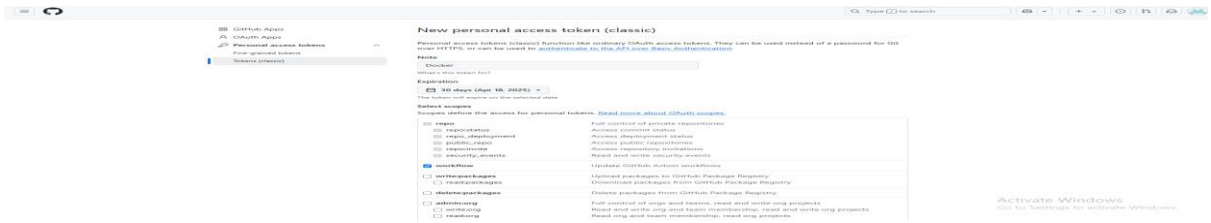
Activate Windows

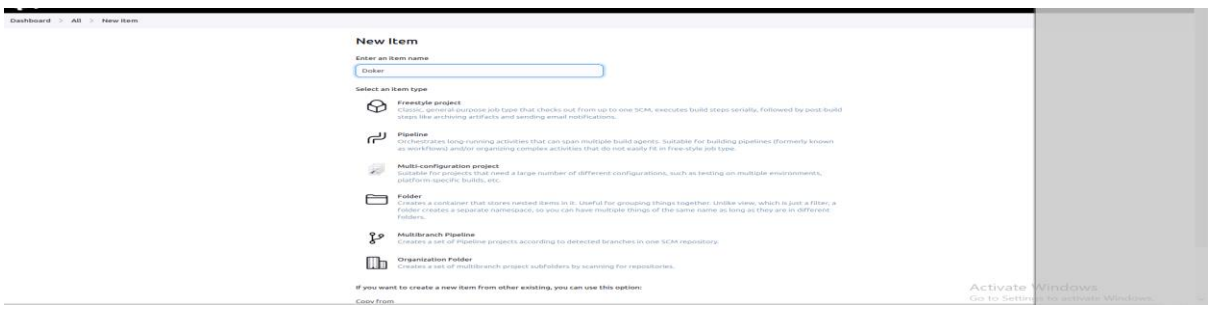


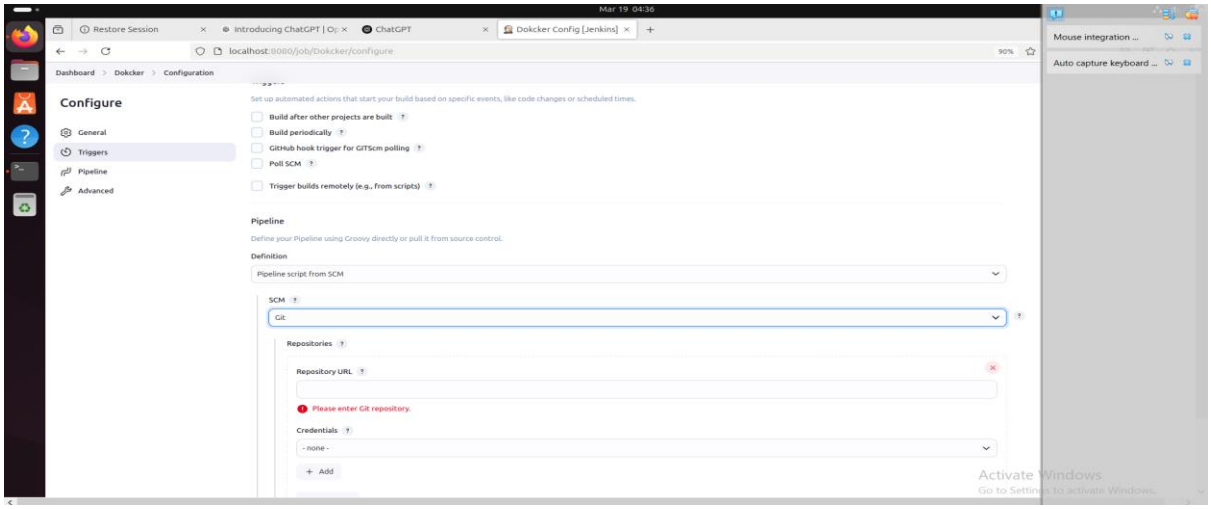


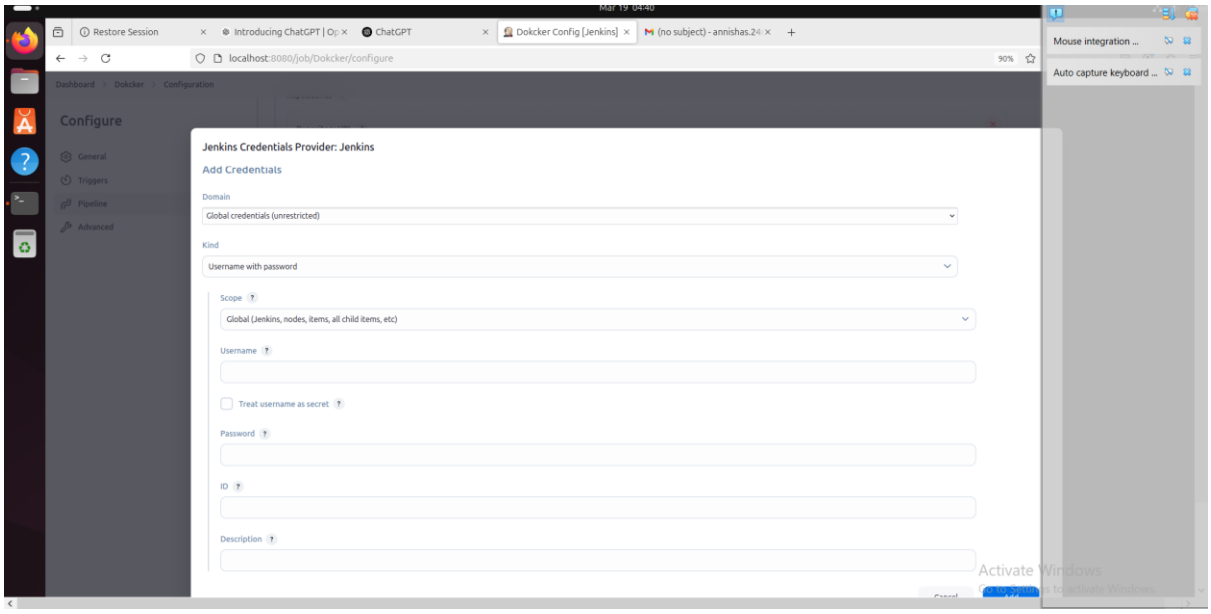


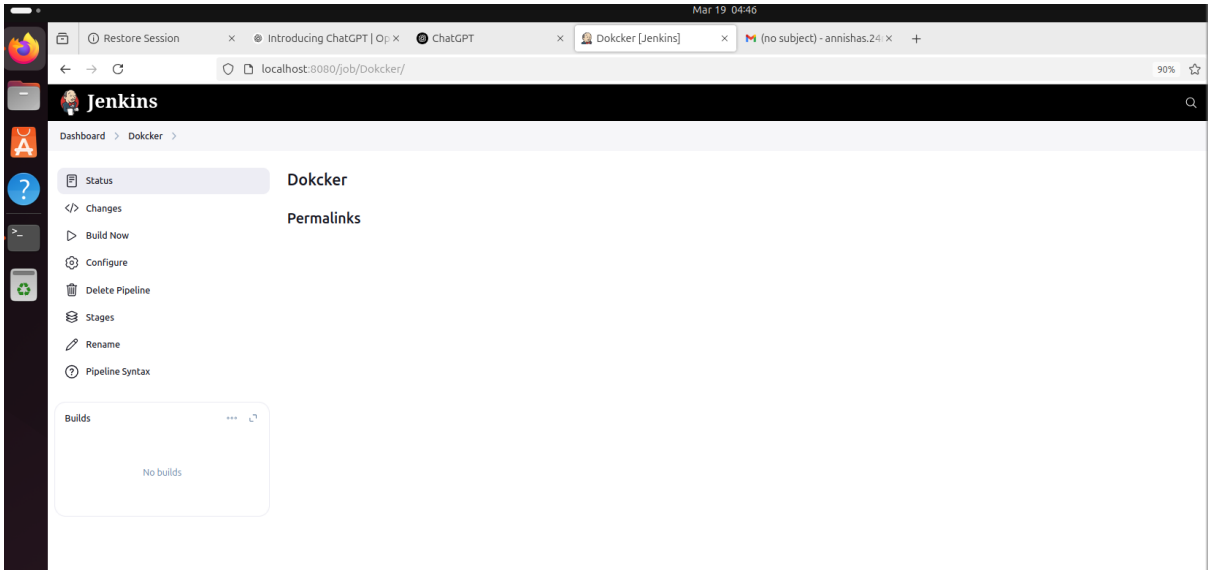
https://github.com/settings/tokens/new





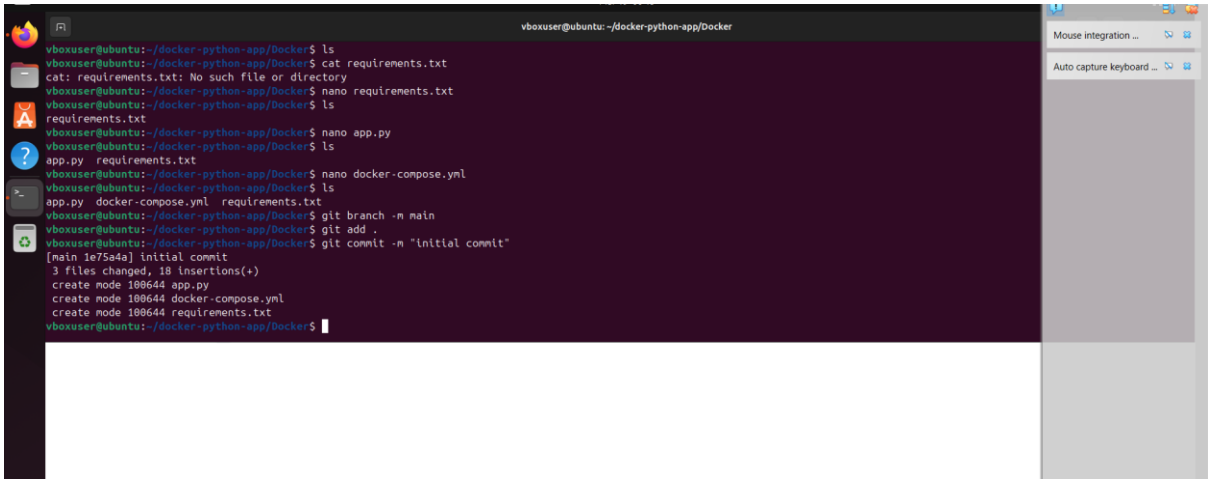

Mar 19 04:36
Restore Session
Introducing ChatGPT | Op
ChatGPT
Dokcker Config [Jenkins]
localhost:8080/job/Dokcker/configure
Dashboard > Dokcker > Configuration
Configure
General
Triggers
Pipeline
Advanced
Set up automated actions that start your build based on specific events, like code changes or scheduled times.
Build after other projects are built
Build periodically
GitHub hook trigger for GITScm polling
Poll SCM
Trigger builds remotely (e.g., from scripts)
Pipeline
Define your Pipeline using Groovy directly or pull it from source control.
Definition
Pipeline script from SCM
SCM
Git
Repositories
Repository URL
Please enter Git repository.
Credentials
- none -
Add
Mouse integration ...
Auto capture keyboard ...
Activate Windows

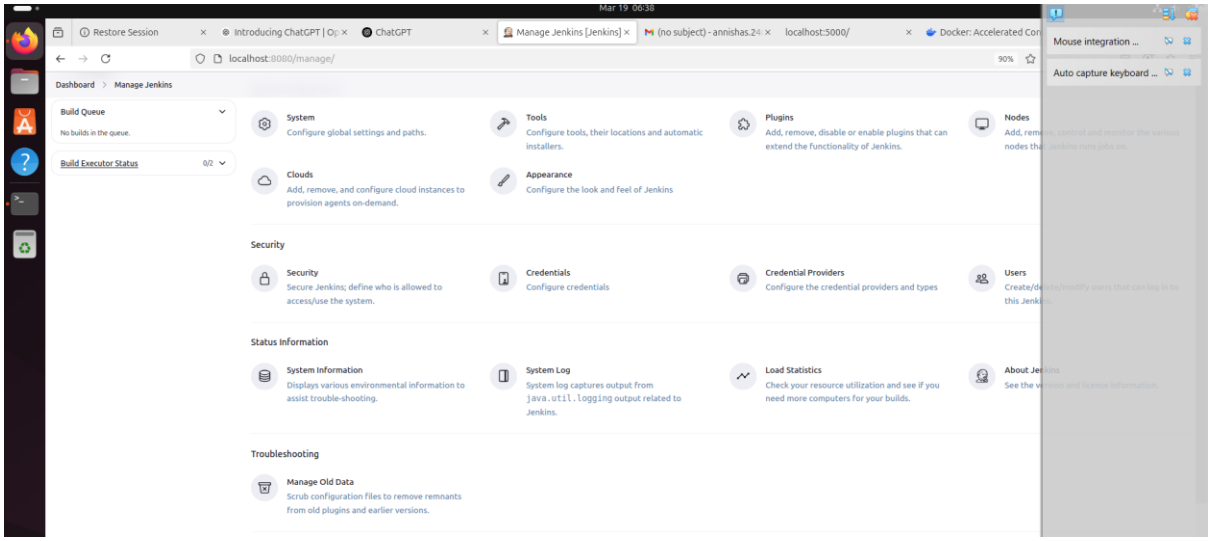

Restore Session
Introducing ChatGPT | Op
ChatGPT
Dokcker Config [Jenkins]
(no subject) - annishas.24
localhost:8080/job/Dokcker/configure
Dashboard > Dokcker > Configuration
Configure
General
Triggers
Pipeline
Advanced
Jenkins Credentials Provider: Jenkins
Add Credentials
Domain
Global credentials (unrestricted)
Kind
Username with password
Scope
Global (Jenkins, nodes, items, all child items, etc)
Username
Treat username as secret
Password
ID
Description
Mouse integration ...
Auto capture keyboard ...
Activate Windows

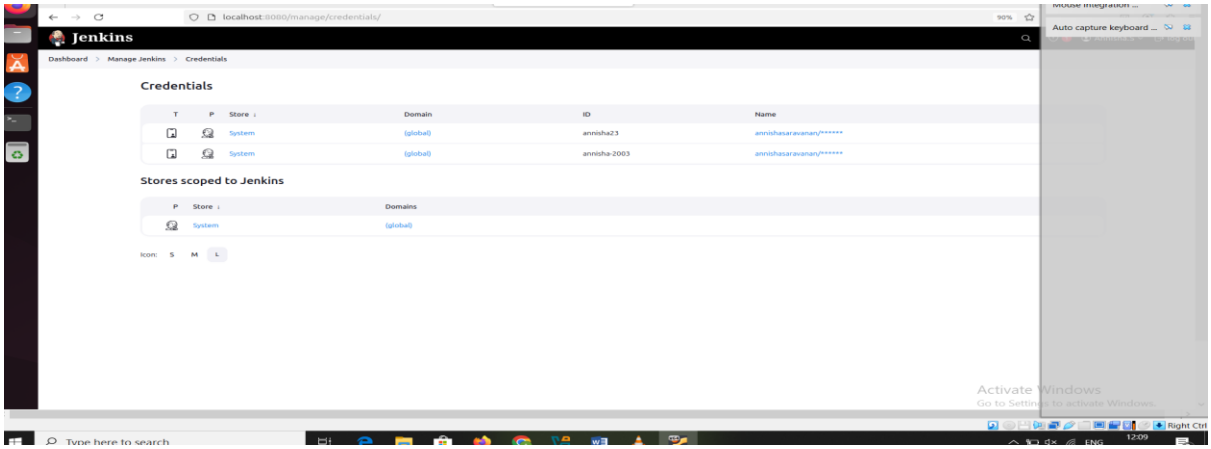

Mar 19 04:46
Restore Session
Introducing ChatGPT | Op
ChatGPT
Dokcker [Jenkins]
(no subject) - annishas.24
localhost:8080/job/Dokcker/
90%
Jenkins
Dashboard
Dokcker
Status
Changes
Build Now
Configure
Delete Pipeline
Stages
Rename
Pipeline Syntax
Builds
No builds
Dokcker
Permalinks

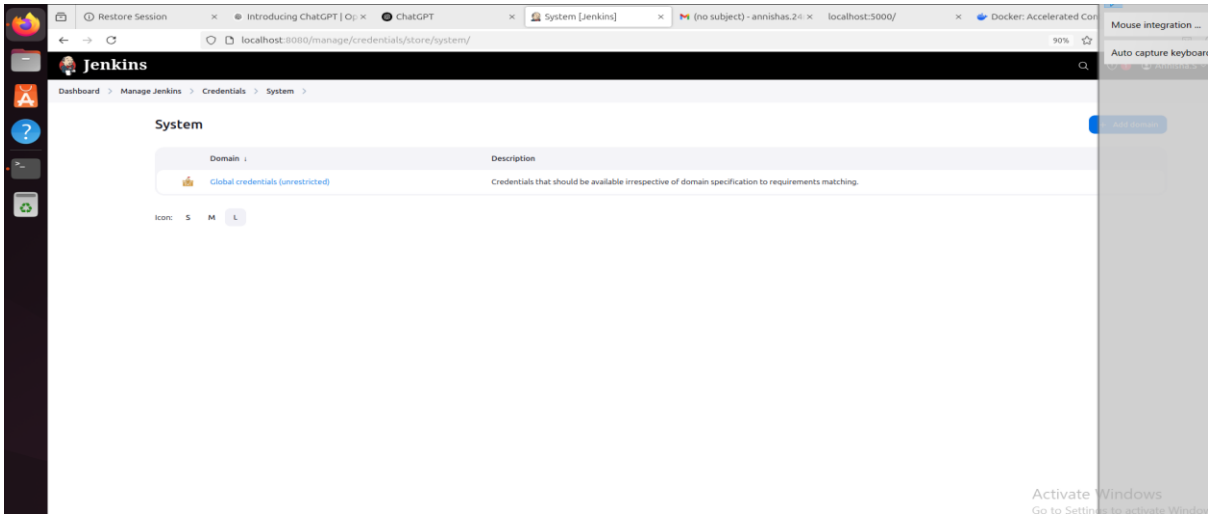
vboxuser@ubuntu:~/docker-python-app$ cd ..
vboxuser@ubuntu:~$ ls
Desktop Docker docker-python-app Documents Downloads Music Pictures Public snap Templates Videos
vboxuser@ubuntu:~$ git clone https://github.com/annishasaravanan/Docker.git
fatal: destination path 'Docker' already exists and is not an empty directory.
vboxuser@ubuntu:~$ ls
Desktop Docker docker-python-app Documents Downloads Music Pictures Public snap Templates Videos
vboxuser@ubuntu:~$ cd docker-python-app
vboxuser@ubuntu:~/docker-python-app$ ls
dockerfile
vboxuser@ubuntu:~/docker-python-app$ mv app.py docker-compose.yml requirements.txt ../Docker/
mv: cannot stat 'app.py': No such file or directory
mv: cannot stat 'docker-compose.yml': No such file or directory
mv: cannot stat 'requirements.txt': No such file or directory
vboxuser@ubuntu:~/docker-python-app$ ls
dockerfile
vboxuser@ubuntu:~/docker-python-app$ mv dockerfile ../Docker/

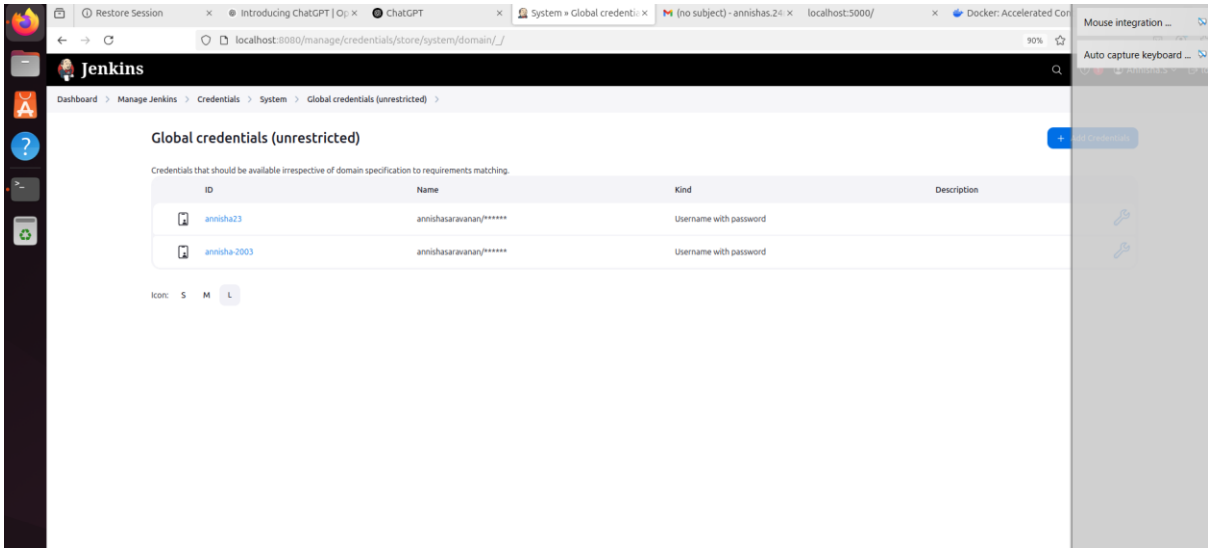
lines 1-20/20 (END)
vboxuser@ubuntu:~$ git clone https://github.com/annishasaravanan/Docker.git
Cloning into 'Docker'...
remote: Enumerating objects: 5, done.
remote: Counting objects: 100% (5/5), done.
remote: Compressing objects: 100% (2/2), done.
remote: Total 5 (delta 0), reused 0 (delta 0), pack-reused 0 (from 0)
Receiving objects: 100% (5/5), done.
vboxuser@ubuntu:~$ ls
Desktop Docker docker-python-app Documents Downloads Music Pictures Public snap Templates Videos
vboxuser@ubuntu:~$ cd docker-python-app
vboxuser@ubuntu:~/docker-python-app$ ls
app.py docker-compose.yml dockerfile requirements.txt
vboxuser@ubuntu:~/docker-python-app$ mv app.py docker-compose.yml requirements.txt ../Docker/
vboxuser@ubuntu:~/docker-python-app$ ls
dockerfile
vboxuser@ubuntu:~/docker-python-app$ cd ..
Mouse integration ...
Auto capture keyboard ...


vboxuser@ubuntu: ~/docker-python-app/Docker
vboxuser@ubuntu:~/docker-python-app/Docker$ ls
vboxuser@ubuntu:~/docker-python-app/Docker$ cat requirements.txt
cat: requirements.txt: No such file or directory
vboxuser@ubuntu:~/docker-python-app/Docker$ nano requirements.txt
vboxuser@ubuntu:~/docker-python-app/Docker$ ls
requirements.txt
vboxuser@ubuntu:~/docker-python-app/Docker$ nano app.py
vboxuser@ubuntu:~/docker-python-app/Docker$ ls
app.py requirements.txt
vboxuser@ubuntu:~/docker-python-app/Docker$ nano docker-compose.yml
vboxuser@ubuntu:~/docker-python-app/Docker$ ls
app.py docker-compose.yml requirements.txt
vboxuser@ubuntu:~/docker-python-app/Docker$ git branch -m main
vboxuser@ubuntu:~/docker-python-app/Docker$ git add .
vboxuser@ubuntu:~/docker-python-app/Docker$ git commit -m "initial commit"
[main 1e75a4a] initial commit
3 files changed, 18 insertions(+)
create mode 100644 app.py
create mode 100644 docker-compose.yml
create mode 100644 requirements.txt
vboxuser@ubuntu:~/docker-python-app/Docker$
Mouse integration ...
Auto capture keyboard ...

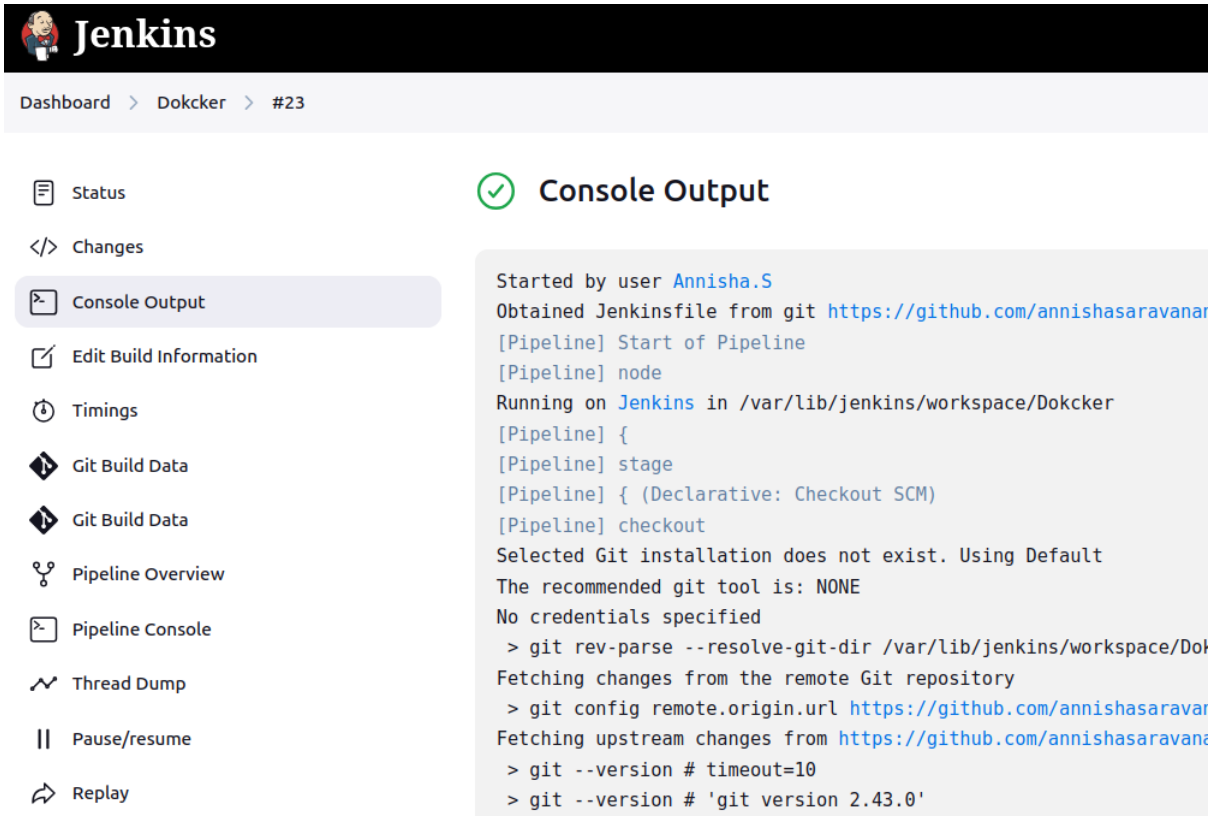

Restore Session
Introducing ChatGPT | Op
ChatGPT
Manage Jenkins [Jenkins]
(no subject) - annishas.24
localhost:5000/
Docker: Accelerated Cont
localhost:8080/manage/
Mouse integration ...
Auto capture keyboard ...
Dashboard > Manage Jenkins
Build Queue
No builds in the queue.
Build Executor Status
0/2
System
Configure global settings and paths.
Tools
Configure tools, their locations and automatic installers.
Plugins
Add, remove, disable or enable plugins that can extend the functionality of Jenkins.
Nodes
Clouds
Add, remove, and configure cloud instances to provision agents on-demand.
Appearance
Configure the look and feel of Jenkins
Security
Security
Secure Jenkins; define who is allowed to access/use the system.
Credentials
Configure credentials
Credential Providers
Configure the credential providers and types
Users
Status Information
System Information
Displays various environmental information to assist trouble-shooting.
System Log
System log captures output from java.util.logging output related to Jenkins.
Load Statistics
Check your resource utilization and see if you need more computers for your builds.
Troubleshooting
Manage Old Data
Scrub configuration files to remove remnants from old plugins and earlier versions.

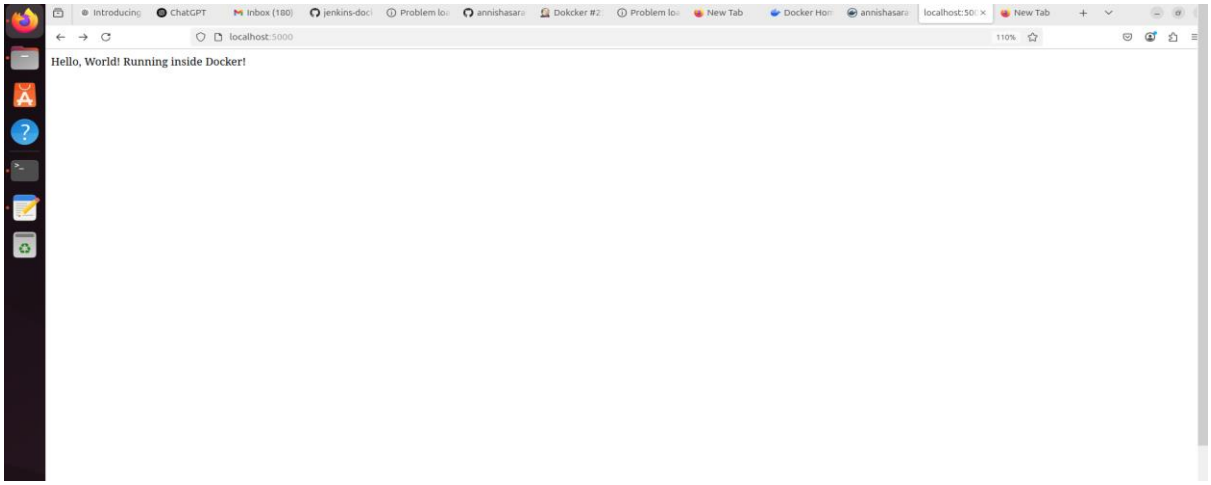

localhost:8080/manage/credentials/
Jenkins
Dashboard > Manage Jenkins > Credentials
Credentials
T
P
Store
Domain
ID
Name
System
(global)
annisha23
annishasaravanan/******
annisha-2003
Stores scoped to Jenkins
Domains
Icon: S M L
Activate Windows
Type here to search


Restore Session
Introducing ChatGPT | Op
ChatGPT
System [Jenkins]
(no subject) - annishas.24
localhost:5000/
Docker: Accelerated Cont
localhost:8080/manage/credentials/store/system/
Mouse integration ...
Auto capture keyboard
Jenkins
Dashboard > Manage Jenkins > Credentials > System
System
Domain
Description
Global credentials (unrestricted)
Credentials that should be available irrespective of domain specification to requirements matching.
Icon: S M L
Activate Windows


Jenkins
Dashboard > Manage Jenkins > Credentials > System > Global credentials (unrestricted)
Global credentials (unrestricted)
Credentials that should be available irrespective of domain specification to requirements matching.
ID
Name
Kind
Description
annisha23
annishasaravanan/******
Username with password
annisha-2003
annishasaravanan/******
Username with password
Icon: S M L

Total 4 (delta 0), reused 0 (delta 0), pack-reused 0
To https://github.com/annishasaravanan/Docker.git
43fe929..172245a main -> main
vboxuser@ubuntu:~/docker-python-app/Docker$ sudo usermod -aG docker jenkins
[sudo] password for vboxuser:
vboxuser@ubuntu:~/docker-python-app/Docker$ sudo usermod -aG docker jenkins
vboxuser@ubuntu:~/docker-python-app/Docker$ sudo systemctl restart jenkins
vboxuser@ubuntu:~/docker-python-app/Docker$ docker ps
permission denied while trying to connect to the Docker daemon socket at unix:///var/run/docker.sock: Get "http://%2Fvar%2Frun%2Fdocker.sock/v1.45/containers/json": dial unix /var/run
docker.sock: connect: permission denied
vboxuser@ubuntu:~/docker-python-app/Docker$ sudo usermod -aG docker jenkins
vboxuser@ubuntu:~/docker-python-app/Docker$ sudo systemctl restart jenkins
vboxuser@ubuntu:~/docker-python-app/Docker$
Pipeline Console
Aborted by user Annisha.S
No changes.


Jenkins
Dashboard > Dokcker > #23
Status
Changes
Console Output
Edit Build Information
Timings
Git Build Data
Git Build Data
Pipeline Overview
Pipeline Console
Thread Dump
Pause/resume
Replay
Console Output
Started by user Annisha.S
Obtained Jenkinsfile from git https://github.com/annishasaravanan
[Pipeline] Start of Pipeline
[Pipeline] node
Running on Jenkins in /var/lib/jenkins/workspace/Dokcker
[Pipeline] {
[Pipeline] stage
[Pipeline] { (Declarative: Checkout SCM)
[Pipeline] checkout
Selected Git installation does not exist. Using Default
The recommended git tool is: NONE
No credentials specified
> git rev-parse --resolve-git-dir /var/lib/jenkins/workspace/Dok
Fetching changes from the remote Git repository
> git config remote.origin.url https://github.com/annishasaravan
Fetching upstream changes from https://github.com/annishasaravana
> git --version # timeout=10
> git --version # 'git version 2.43.0'


Introducing
ChatGPT
Inbox (180)
New Tab
localhost:5000
110%
Hello, World! Running inside Docker!