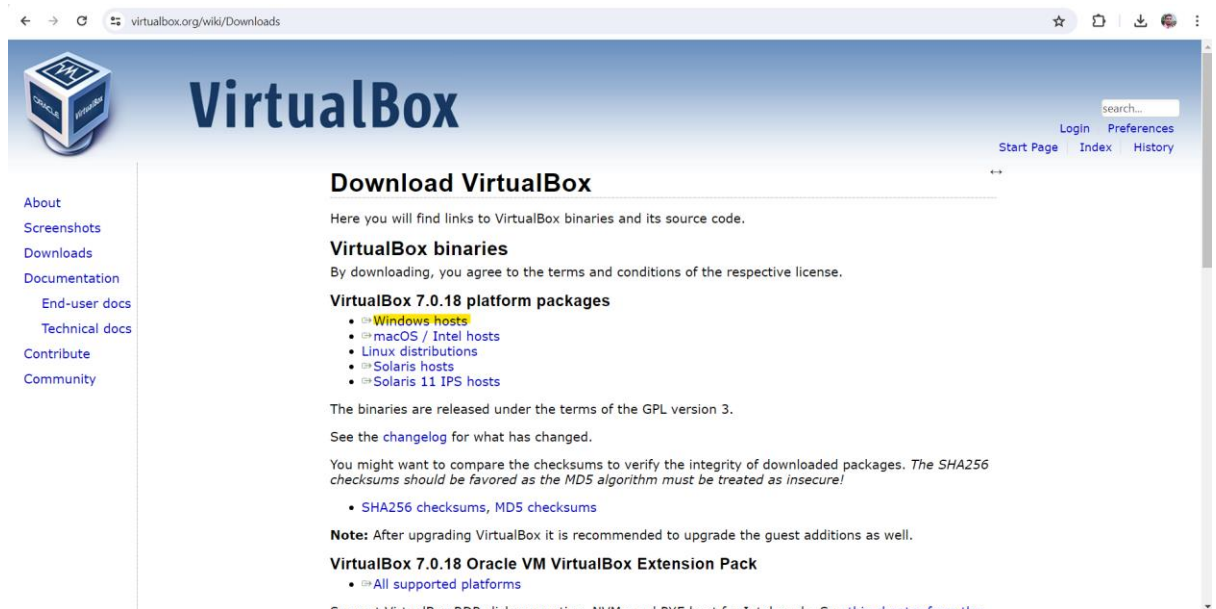


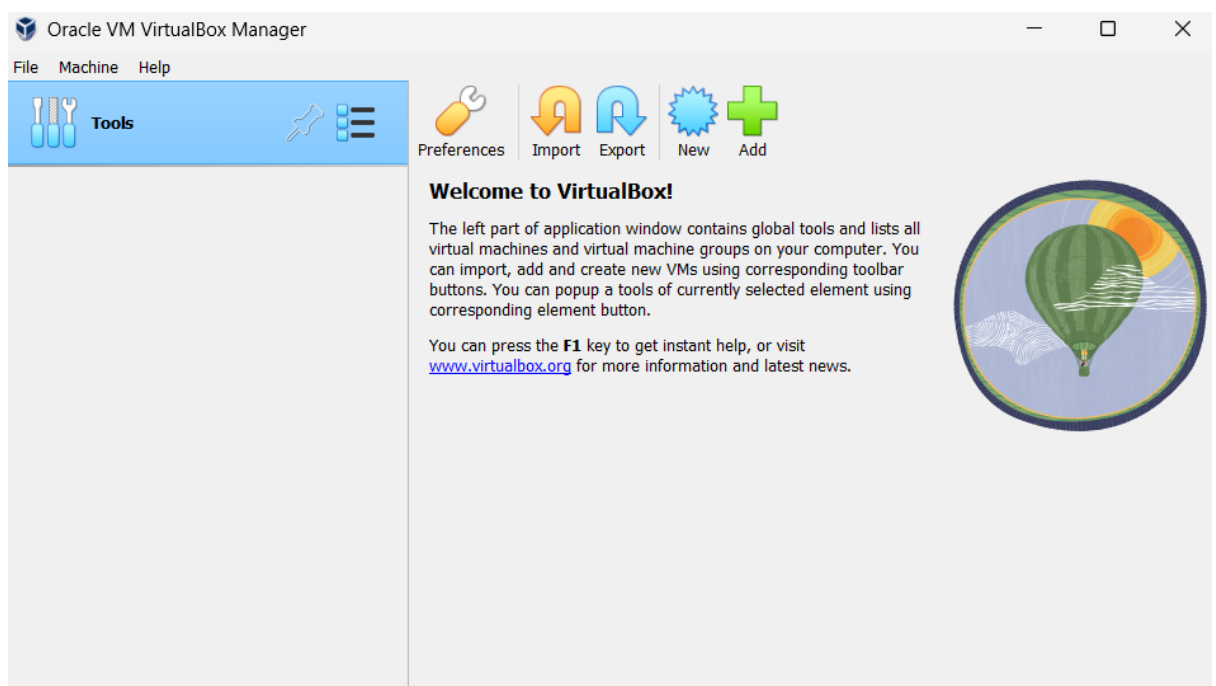
HeroVired : Networking and Servers Assignment

Task 3 : Virtual Machine (VM)

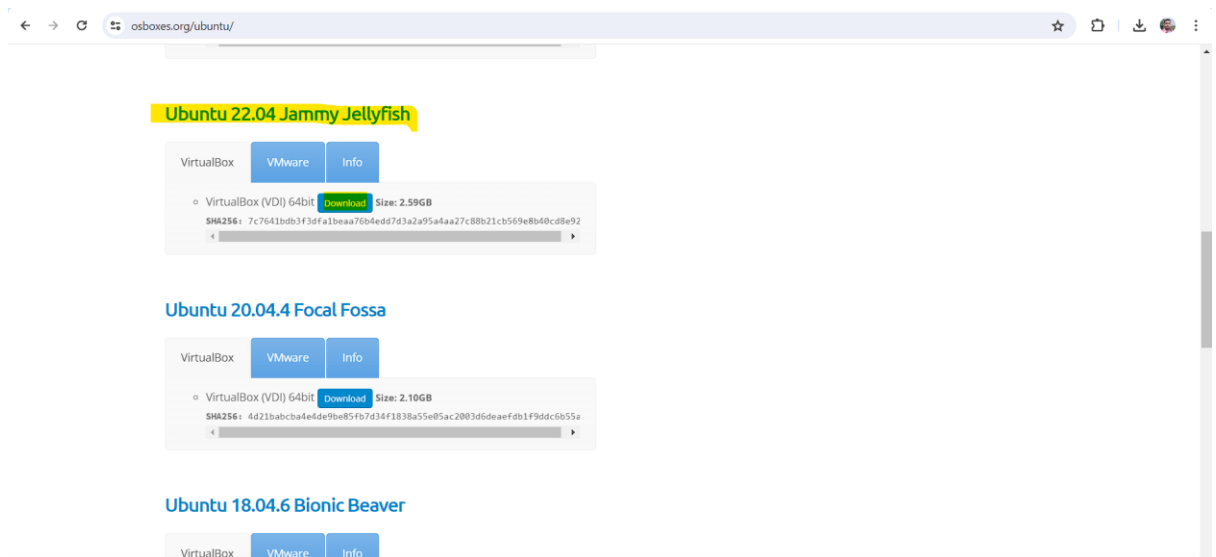
1. Go to <https://www.virtualbox.org> and download installer for windows.



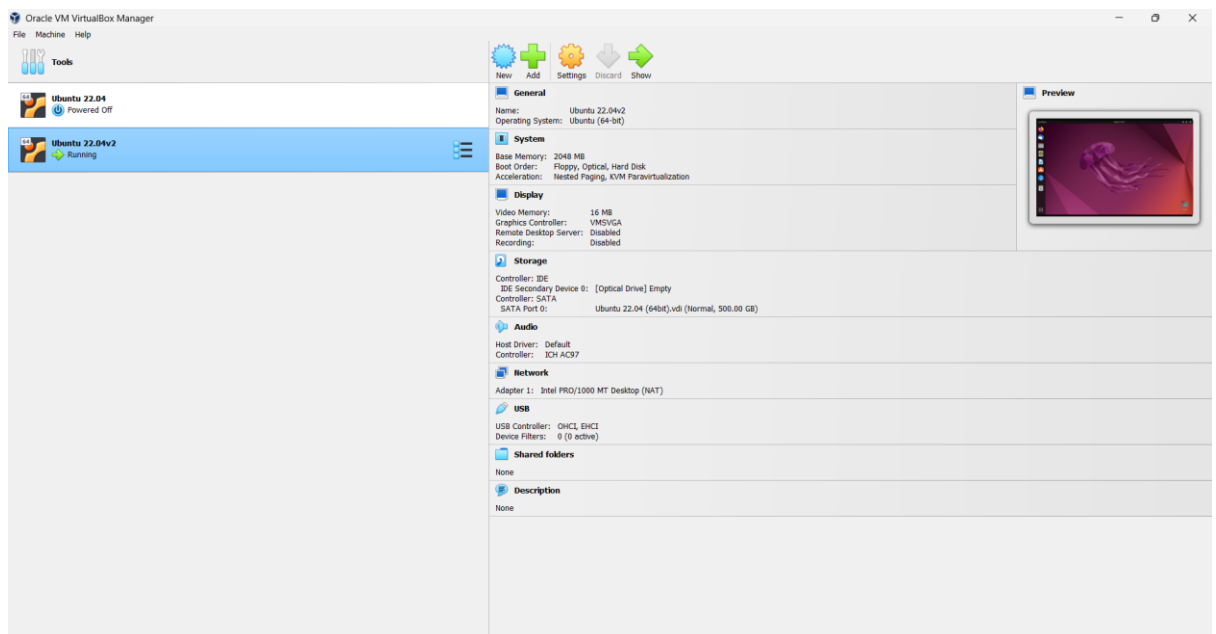
2. Install virtual box. After installation we can see below screen :



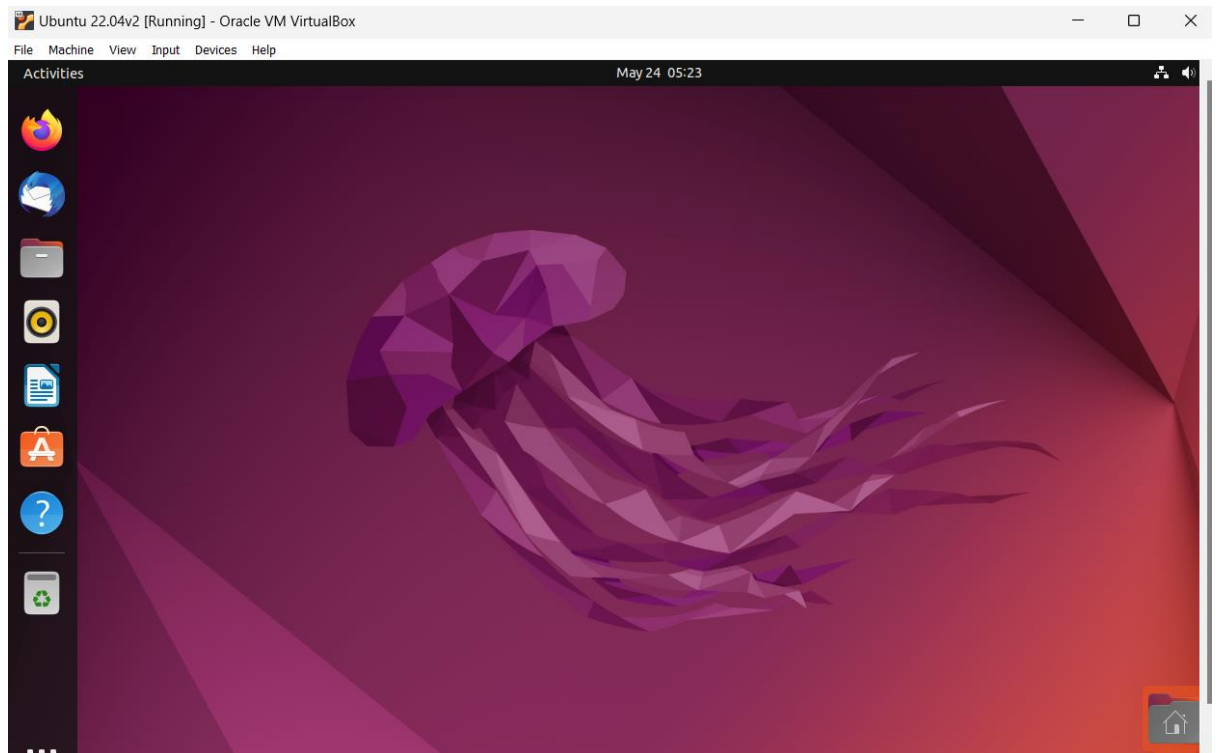
3. Now go to <https://www.osboxes.org/> and download image for Ubuntu 22.04.



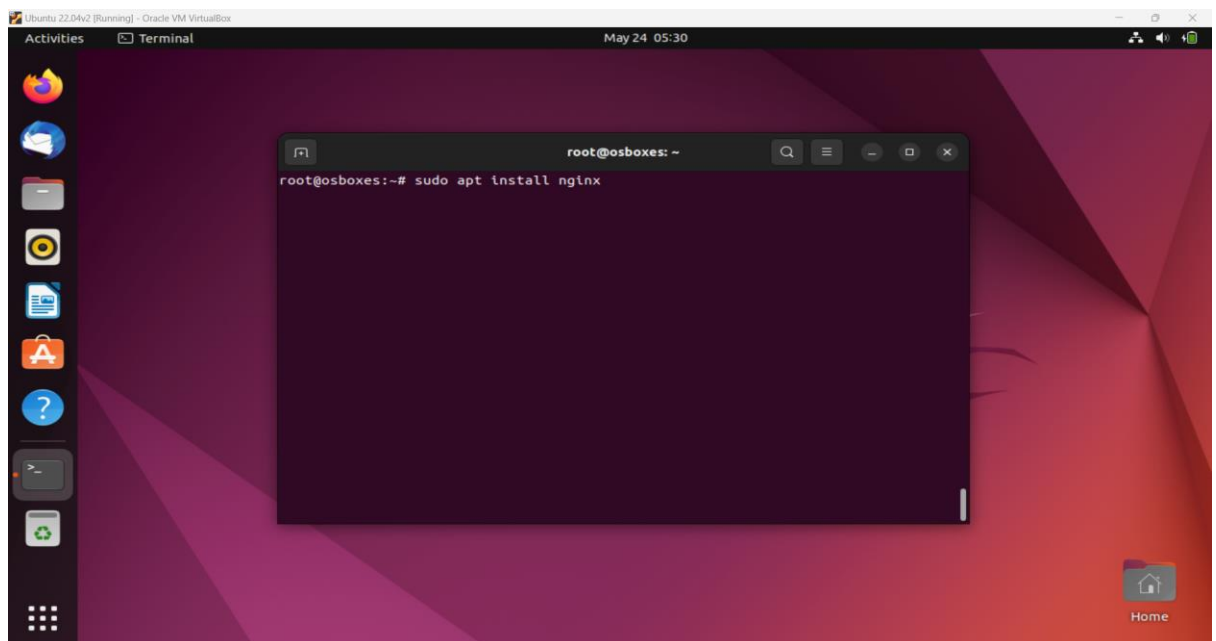
4. Now go to virtual box, click New and give the name to machine and select the VDI.



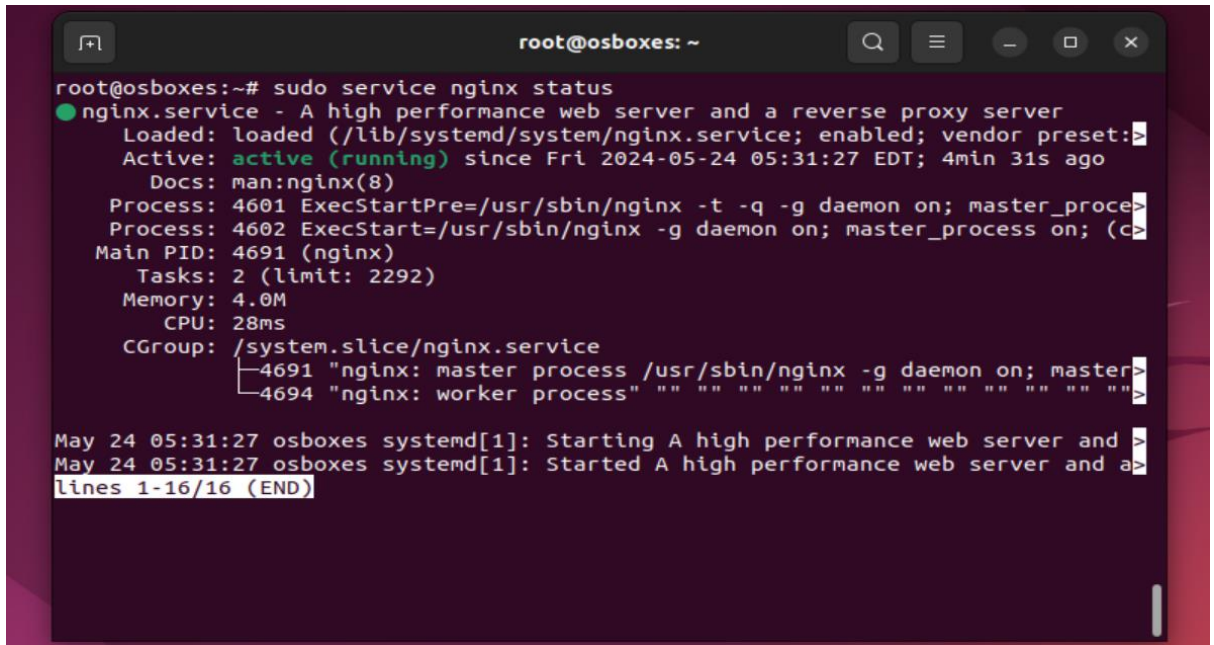
5. Start the machine.



6. Open the terminal and install nginx.

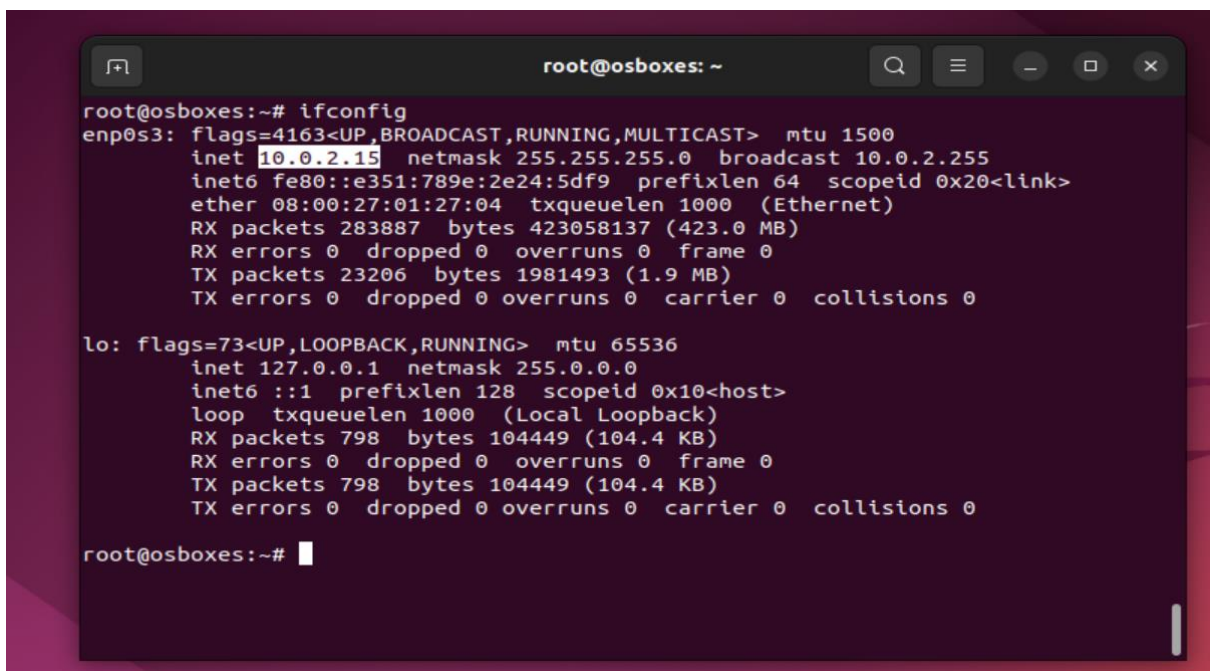


7. After installing nginx run the command 'sudo service nginx status' to see the status of nginx server.

A terminal window titled 'root@osboxes: ~' showing the command 'sudo service nginx status'. The output displays the status of the nginx service as 'active (running)' since Fri 2024-05-24 05:31:27 EDT. It lists details such as the loaded file, active state, docs, process IDs (4601, 4602), main PID (4691), tasks (2), memory (4.0M), CPU (28ms), and CGroup. It also shows the master and worker processes. At the bottom, it indicates the service was started by systemd on May 24 at 05:31:27.

```
root@osboxes:~# sudo service nginx status
● nginx.service - A high performance web server and a reverse proxy server
   Loaded: loaded (/lib/systemd/system/nginx.service; enabled; vendor preset:
   Active: active (running) since Fri 2024-05-24 05:31:27 EDT; 4min 31s ago
     Docs: man:nginx(8)
  Process: 4601 ExecStartPre=/usr/sbin/nginx -t -q -g daemon on; master_proce
 Process: 4602 ExecStart=/usr/sbin/nginx -g daemon on; master_process on; (c
 Main PID: 4691 (nginx)
    Tasks: 2 (limit: 2292)
   Memory: 4.0M
      CPU: 28ms
   CGroup: /system.slice/nginx.service
           └─4691 "nginx: master process /usr/sbin/nginx -g daemon on; master
              └─4694 "nginx: worker process" "" "" "" "" "" "" "" "" "" "" ""
May 24 05:31:27 osboxes systemd[1]: Starting A high performance web server and
May 24 05:31:27 osboxes systemd[1]: Started A high performance web server and a
lines 1-16/16 (END)
```

8. Run ifconfig command to see the ip address and hit the ip address to verify nginx is working as expected.

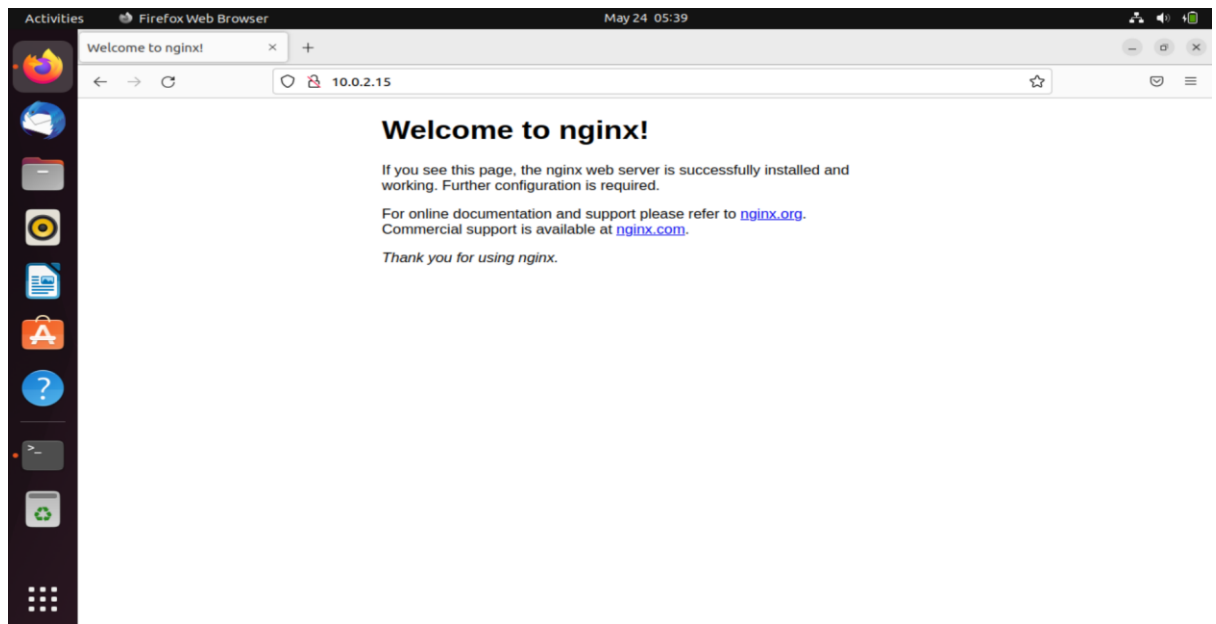
A terminal window titled 'root@osboxes: ~' showing the command 'ifconfig'. The output displays network interface details for 'enp0s3' and 'lo'. For 'enp0s3', it shows flags, mtu, inet address (10.0.2.15), netmask, broadcast, inet6 address, ether address, txqueuelen, RX/TX packets and bytes, and errors. For 'lo', it shows flags, mtu, inet address (127.0.0.1), netmask, inet6 address, loop, txqueuelen, RX/TX packets and bytes, and errors.

```
root@osboxes:~# 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::e351:789e:2e24:5df9 prefixlen 64 scopeid 0x20<link>
    ether 08:00:27:01:27:04 txqueuelen 1000 (Ethernet)
    RX packets 283887 bytes 423058137 (423.0 MB)
    RX errors 0 dropped 0 overruns 0 frame 0
    TX packets 23206 bytes 1981493 (1.9 MB)
    TX errors 0 dropped 0 overruns 0 carrier 0 collisions 0

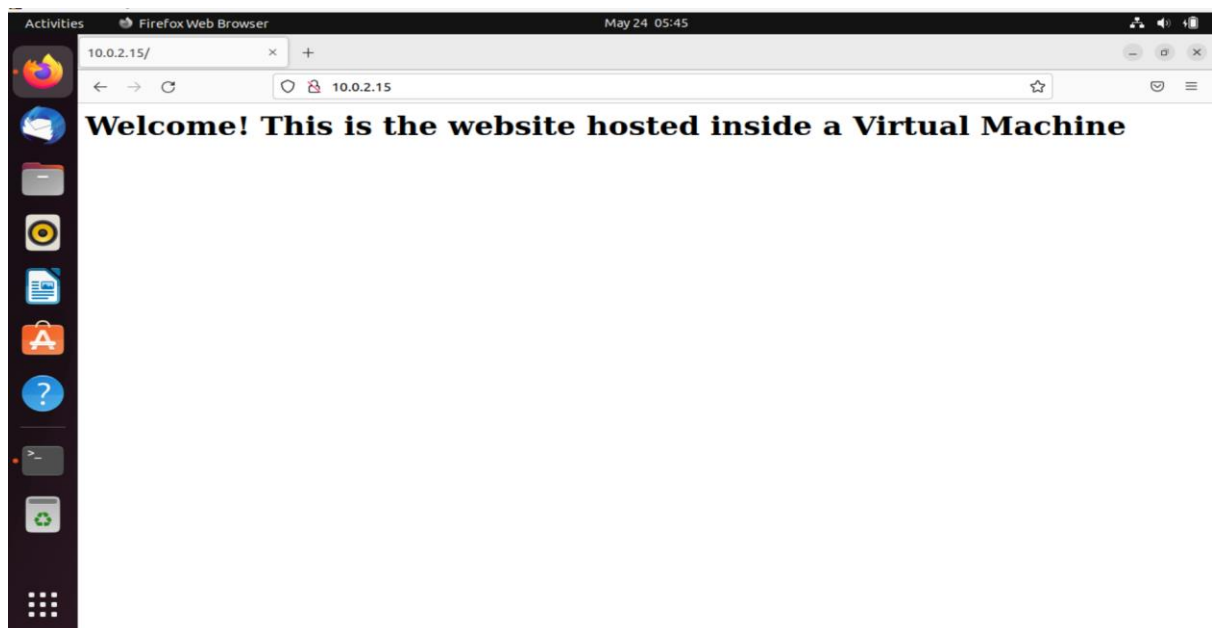
lo: flags=73<UP,LOOPBACK,RUNNING> mtu 65536
    inet 127.0.0.1 netmask 255.0.0.0
    inet6 ::1 prefixlen 128 scopeid 0x10<host>
    loop txqueuelen 1000 (Local Loopback)
    RX packets 798 bytes 104449 (104.4 KB)
    RX errors 0 dropped 0 overruns 0 frame 0
    TX packets 798 bytes 104449 (104.4 KB)
    TX errors 0 dropped 0 overruns 0 carrier 0 collisions 0

root@osboxes:~#
```








We will see below –



9. Now in order to host our own site, go to `/var/www/html` and remove the default file and replace with a new `index.html`. After restart the nginx using `'sudo service nginx restart'` command and hit the ip address again. Will see the below :



10. Nmap scan output –

Nmap Output		Ports / Hosts		Topology	Host Details	Scans
	Port	Protocol	State	Service	Version	
	25	tcp	filtered	smtp		
	110	tcp	filtered	pop3		
	135	tcp	open	msrpc		
	139	tcp	open	netbios-ssn		
	445	tcp	open	microsoft-ds		
	548	tcp	filtered	afp		
	7070	tcp	open	realserver		