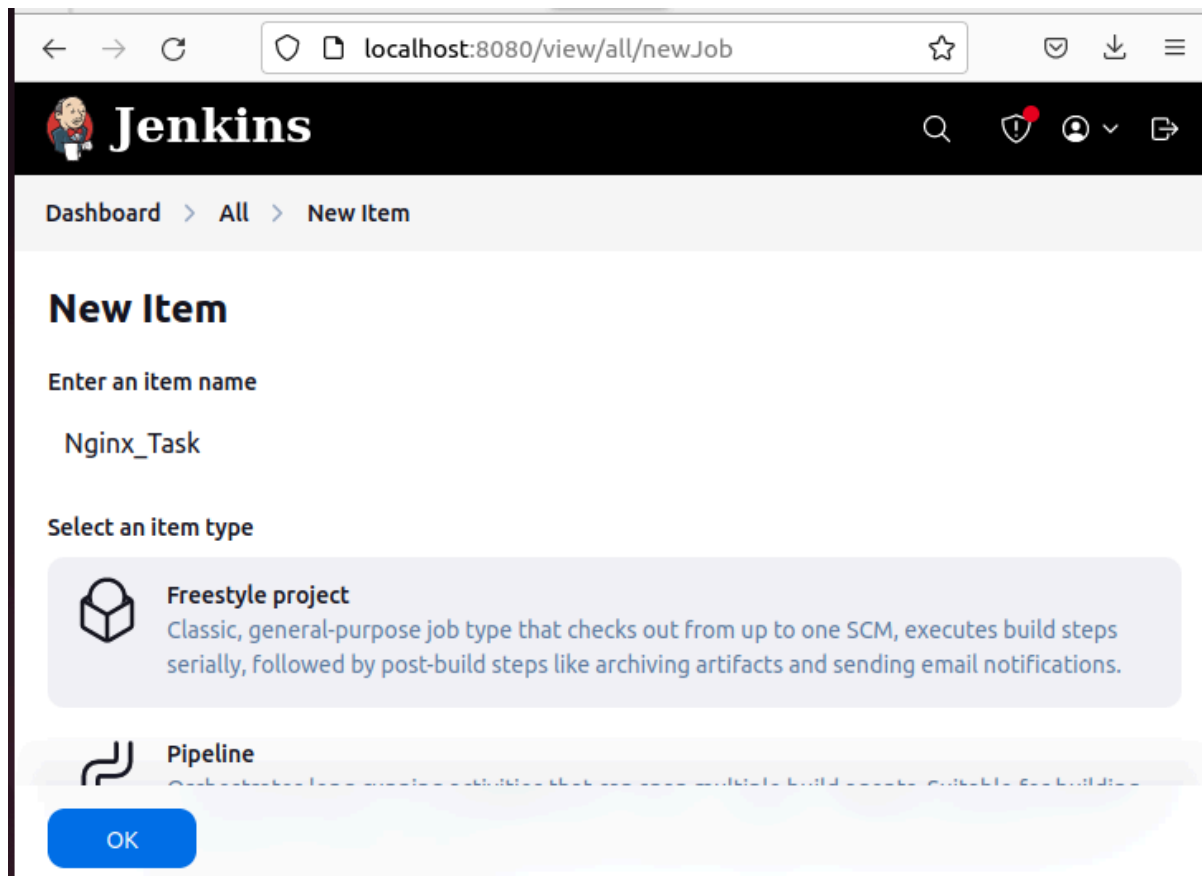# DEVOPS TASK - 1

Step 1: Open Oracle virtual Box and open the terminal

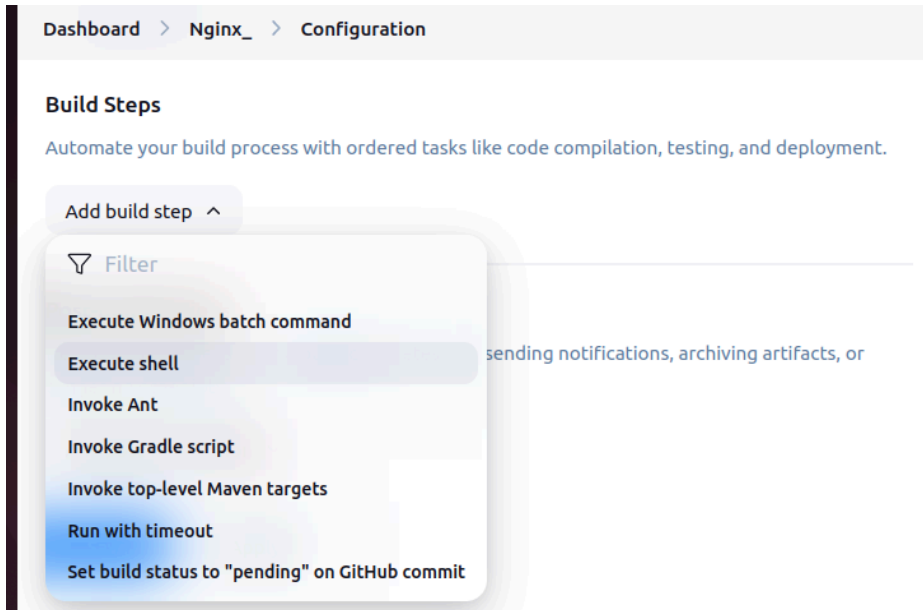Step 2: Enter the username(su) and password(changeme)

Step 3: Give "sudo su -" to switch to the root user within a login shell.

Step 4: Open jenkins and click on new item as "Nginx-Task"

Step 5: Select the item type as "FreeStyle Project"

Step 6: Go to Build Steps and choose Execute Shell from Add build steps.

Step 7:Give the commands
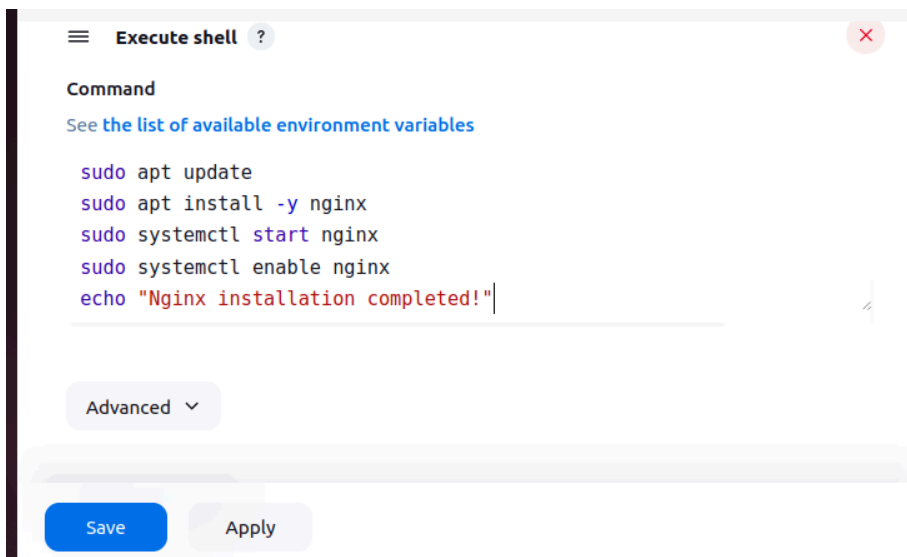
Step 8: Then click on "Save" .
Step 9: Click "Build now".
Step 10: Go to console output, I faced a sudo password related error.
Step 11: In the terminal give "visudo"
Step 12: Add "jenkins ALL=(ALL) NOPASSWD: ALL" , save(ctrl+X and Y) and exit.
Step 13: Run "systemctl status nginx"
Step 14: Re-run the Job by clicking "Build Now"
Step 15: Go to console output of #2.

✓ Console Output   ⬇ Download   🗍 Copy   View as plain text

```
Started by user Kowsika J
Running as SYSTEM
Building in workspace /var/lib/jenkins/workspace/Nginx_Task1
[Nginx_Task1] $ /bin/bash /tmp/jenkins35190464866697350366.sh

WARNING: apt does not have a stable CLI interface. Use with caution in
scripts.

Get:1 http://security.ubuntu.com/ubuntu jammy-security InRelease [129 kB]
Hit:2 https://download.docker.com/linux/ubuntu jammy InRelease
Ign:3 https://pkg.jenkins.io/debian-stable binary/ InRelease
Hit:4 http://in.archive.ubuntu.com/ubuntu jammy InRelease
Hit:5 https://pkg.jenkins.io/debian-stable binary/ Release
Get:6 http://in.archive.ubuntu.com/ubuntu jammy-updates InRelease [128 kB]
Get:8 http://in.archive.ubuntu.com/ubuntu jammy-backports InRelease [127 kB]
Reading package lists...
```

```
Setting up libnginx-mod-http-xslt-filter (1.18.0-6ubuntu14.6) ...
Setting up libnginx-mod-http-geoip2 (1.18.0-6ubuntu14.6) ...
Setting up libnginx-mod-mail (1.18.0-6ubuntu14.6) ...
Setting up libnginx-mod-http-image-filter (1.18.0-6ubuntu14.6) ...
Setting up libnginx-mod-stream (1.18.0-6ubuntu14.6) ...
Setting up libnginx-mod-stream-geoip2 (1.18.0-6ubuntu14.6) ...
Setting up nginx-core (1.18.0-6ubuntu14.6) ...
 * Upgrading binary nginx
    ...done.
Setting up nginx (1.18.0-6ubuntu14.6) ...
Processing triggers for man-db (2.10.2-1) ...
Processing triggers for ufw (0.36.1-4build1) ...
Synchronizing state of nginx.service with SysV service script with
/lib/systemd/systemd-sysv-install.
Executing: /lib/systemd/systemd-sysv-install enable nginx
Nginx installation completed!
Finished: SUCCESS
```

Step 16: Go to terminal and give "systemctl status nginx"

```
vboxuser@Ubuntu:~$ su
Password:
root@Ubuntu:/home/vboxuser# sudo su -
root@Ubuntu:~# ip a
1: lo: <LOOPBACK,UP,LOWER_UP> mtu 65536 qdisc noqueue state UNKNOWN group defau
lt qlen 1000
    link/loopback 00:00:00:00:00:00 brd 00:00:00:00:00:00
    inet 127.0.0.1/8 scope host lo
       valid_lft forever preferred_lft forever
    inet6 ::1/128 scope host
       valid_lft forever preferred_lft forever
2: enp0s3: <BROADCAST,MULTICAST,UP,LOWER_UP> mtu 1500 qdisc fq_codel state UP g
roup default qlen 1000
    link/ether 08:00:27:d6:5c:96 brd ff:ff:ff:ff:ff:ff
    inet 10.0.2.15/24 brd 10.0.2.255 scope global dynamic noprefixroute enp0s3
       valid_lft 83272sec preferred_lft 83272sec
    inet6 fe80::34b2:f0c2:e2e4:e75e/64 scope link noprefixroute
       valid_lft forever preferred_lft forever
3: docker0: <NO-CARRIER,BROADCAST,MULTICAST,UP> mtu 1500 qdisc noqueue state DO
WN group default
    link/ether 3a:53:e5:ad:39:6c brd ff:ff:ff:ff:ff:ff
    inet 172.17.0.1/16 brd 172.17.255.255 scope global docker0
       valid_lft forever preferred_lft forever
root@Ubuntu:~# systemctl status nginx
Unit nginx.service could not be found.
root@Ubuntu:~# visudo
root@Ubuntu:~# systemctl status nginx
● nginx.service - A high performance web server and a reverse proxy server
     Loaded: loaded (/lib/systemd/system/nginx.service; enabled; vendor preset>
```

Step 17: Give "hostname - I" in the terminal


```
root@Ubuntu:~# visudo
root@Ubuntu:~# systemctl status nginx
● 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 Tue 2025-03-18 16:53:29 IST; 2min 36s ago
       Docs: man:nginx(8)
   Main PID: 6982 (nginx)
      Tasks: 11 (limit: 4627)
     Memory: 10.2M
        CPU: 1.030s
     CGroup: /system.slice/nginx.service
             ├─6982 "nginx: master process /usr/sbin/nginx -g daemon on; maste>
             ├─6985 "nginx: worker process" "" "" "" "" "" "" "" "" "" "" "" ">
             ├─6986 "nginx: worker process" "" "" "" "" "" "" "" "" "" "" "" ">
             ├─6987 "nginx: worker process" "" "" "" "" "" "" "" "" "" "" "" ">
             ├─6988 "nginx: worker process" "" "" "" "" "" "" "" "" "" "" "" ">
             ├─6989 "nginx: worker process" "" "" "" "" "" "" "" "" "" "" "" ">
             ├─6990 "nginx: worker process" "" "" "" "" "" "" "" "" "" "" "" ">
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             ├─6993 "nginx: worker process" "" "" "" "" "" "" "" "" "" "" "" ">
             └─6994 "nginx: worker process" "" "" "" "" "" "" "" "" "" "" "" ">

Mar 18 16:53:29 Ubuntu systemd[1]: Starting A high performance web server and >
Mar 18 16:53:29 Ubuntu systemd[1]: Started A high performance web server and a>

root@Ubuntu:~# hostname -I
10.0.2.15 172.17.0.1
root@Ubuntu:~#
```

Step 18: This will give the Ip address - 10.0.2.15 , Go to firefox and type **https://10.0.2.15**

10.0.2.15

Welcome to nginx!

If you see this page, the nginx web server is successfully installed and working. Further configuration is required.

For online documentation and support please refer to nginx.org.
Commercial support is available at nginx.com.

Thank you for using nginx.