

# DEVOPS – Task 1

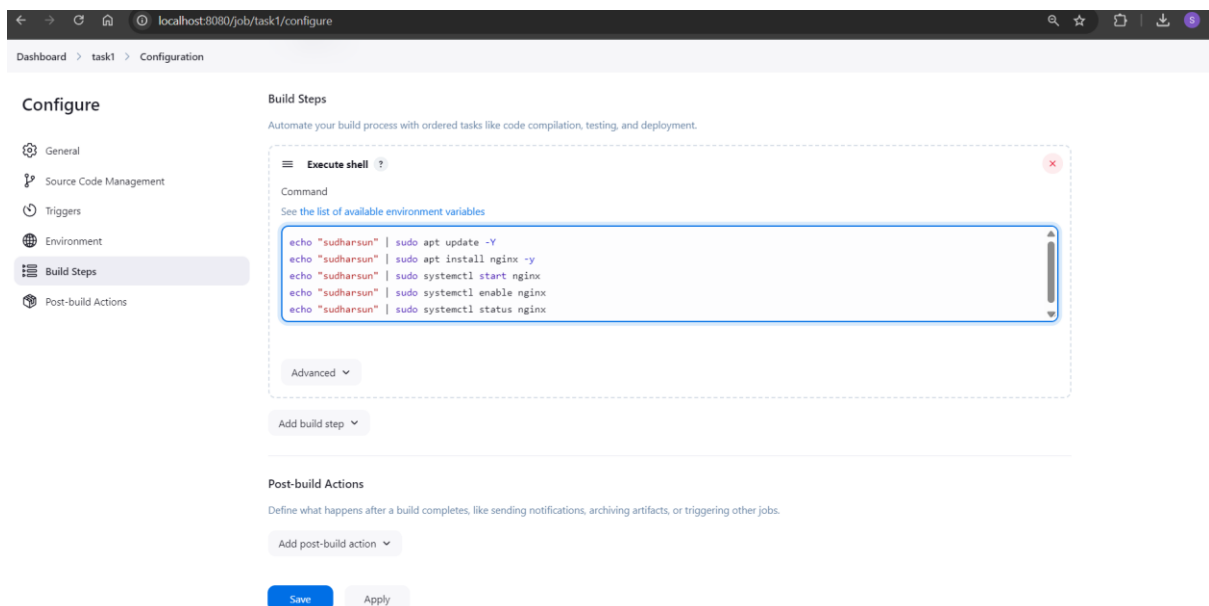
Name: Sudharsun M

Roll.No : 22CSR209

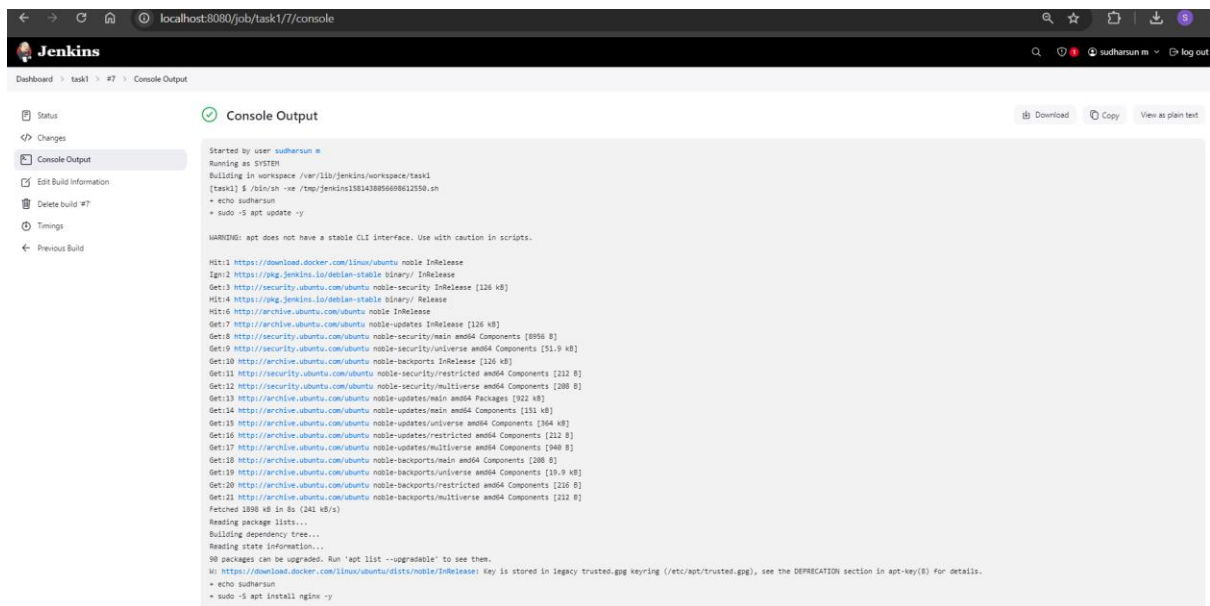
DAY 1 : JENKINS(Installing and setting up Jenkins on Linux machine)

```
shivu@shivu: ~  
shivu@shivu:~/Project/Cshop  
shivu@shivu:~$ sudo apt install openjdk-17-jdk -y  
sudo: command not found  
shivu@shivu:~$ sudo apt install openjdk-17-jdk -y  
[sudo] password for shivu:  
Reading package lists... Done  
Building dependency tree... Done  
Reading state information... Done  
The following additional packages will be installed:  
  ca-certificates-java fonts-dejavu-extra java-common libatk-wrapper-java libatk-wrapper-java-jni libice-dev libpthread-stubs0-dev libsn-dev libx11-dev libxau-dev libxcb1-dev  
  libxdmcp-dev libxt-dev openjdk-17-jdk-headless openjdk-17-jre openjdk-17-jre-headless x11proto-dev xorg-sgml-doctools xtrans-dev  
Suggested packages:  
  default-jre libice-doc libsn-doc libx11-doc libxcb-doc libxt-doc openjdk-17-demo openjdk-17-source visualvm fonts-ipafont-gothic fonts-ipafont-mincho fonts-wqy-microhei  
  fonts-wqy-zenhei fonts-indic  
The following NEW packages will be installed:  
  ca-certificates-java fonts-dejavu-extra java-common libatk-wrapper-java libatk-wrapper-java-jni libice-dev libpthread-stubs0-dev libsn-dev libx11-dev libxau-dev libxcb1-dev  
  libxdmcp-dev libxt-dev openjdk-17-jdk openjdk-17-jdk-headless openjdk-17-jre openjdk-17-jre-headless x11proto-dev xorg-sgml-doctools xtrans-dev  
0 upgraded, 20 newly installed, 0 to remove and 68 not upgraded.  
Need to get 125 MB of archives.  
After this operation, 288 MB of additional disk space will be used.  
Get:1 http://in.archive.ubuntu.com/ubuntu noble/main amd64 ca-certificates-java all 20240118 [11.6 kB]  
Get:2 http://in.archive.ubuntu.com/ubuntu noble/main amd64 fonts-dejavu-extra all 2.37-8 [1,947 kB]  
Get:3 http://in.archive.ubuntu.com/ubuntu noble/main amd64 java-common all 0.75+exp1 [6,798 B]  
Get:4 http://in.archive.ubuntu.com/ubuntu noble/main amd64 libatk-wrapper-java all 0.40.0-3build2 [54.3 kB]  
Get:5 http://in.archive.ubuntu.com/ubuntu noble/main amd64 libatk-wrapper-java-jni amd64 0.40.0-3build2 [46.4 kB]  
Get:6 http://in.archive.ubuntu.com/ubuntu noble/main amd64 xorg-sgml-doctools all 1:1.11-1.1 [10.9 kB]  
Get:7 http://in.archive.ubuntu.com/ubuntu noble/main amd64 x11proto-dev all 2023.2-1 [602 kB]  
Get:8 http://in.archive.ubuntu.com/ubuntu noble/main amd64 libice-dev amd64 2:1.0.10-1build3 [51.0 kB]  
Get:9 http://in.archive.ubuntu.com/ubuntu noble/main amd64 libpthread-stubs0-dev amd64 0.4-1build3 [4,746 B]  
Get:10 http://in.archive.ubuntu.com/ubuntu noble/main amd64 libsn-dev amd64 2:1.2.3-1build3 [17.0 kB]  
Get:11 http://in.archive.ubuntu.com/ubuntu noble/main amd64 libxau-dev amd64 1:1.0.9-1build6 [9,570 B]  
Get:12 http://in.archive.ubuntu.com/ubuntu noble/main amd64 libxdmcp-dev amd64 1:1.1.3-0ubuntu6 [26.5 kB]  
Get:13 http://in.archive.ubuntu.com/ubuntu noble/main amd64 xtrans-dev all 1.4.0-1 [68.9 kB]  
Get:14 http://in.archive.ubuntu.com/ubuntu noble/main amd64 libxcb1-dev amd64 1.15-1ubuntu2 [85.8 kB]  
Get:15 http://in.archive.ubuntu.com/ubuntu noble/main amd64 libx11-dev amd64 2:1.8.7-1build1 [732 kB]  
Get:16 http://in.archive.ubuntu.com/ubuntu noble/main amd64 libxt-dev amd64 1:1.2.1-1.2build1 [394 kB]  
Get:17 http://in.archive.ubuntu.com/ubuntu noble-updates/main amd64 openjdk-17-jre-headless amd64 17.0.14+7-1-24.04 [47.9 MB]  
Get:18 http://in.archive.ubuntu.com/ubuntu noble-updates/main amd64 openjdk-17-jre amd64 17.0.14+7-1-24.04 [220 kB]  
Get:19 http://in.archive.ubuntu.com/ubuntu noble-updates/main amd64 openjdk-17-jdk-headless amd64 17.0.14+7-1-24.04 [71.4 MB]  
Ign:19 http://in.archive.ubuntu.com/ubuntu noble-updates/main amd64 openjdk-17-jdk-headless amd64 17.0.14+7-1-24.04  
Ign:20 http://in.archive.ubuntu.com/ubuntu noble-updates/main amd64 openjdk-17-jdk amd64 17.0.14+7-1-24.04  
Get:20 http://security.ubuntu.com/ubuntu noble-updates/main amd64 openjdk-17-jdk amd64 17.0.14+7-1-24.04 [1,523 kB]  
Get:19 http://in.archive.ubuntu.com/ubuntu noble-updates/main amd64 openjdk-17-jdk-headless amd64 17.0.14+7-1-24.04 [71.4 MB]  
Fetched 124 MB in 40s (3,116 kB/s)  
selecting previously unselected package ca-certificates-java  
...
```

## #Execute Shell(Commands)



## #Console Output

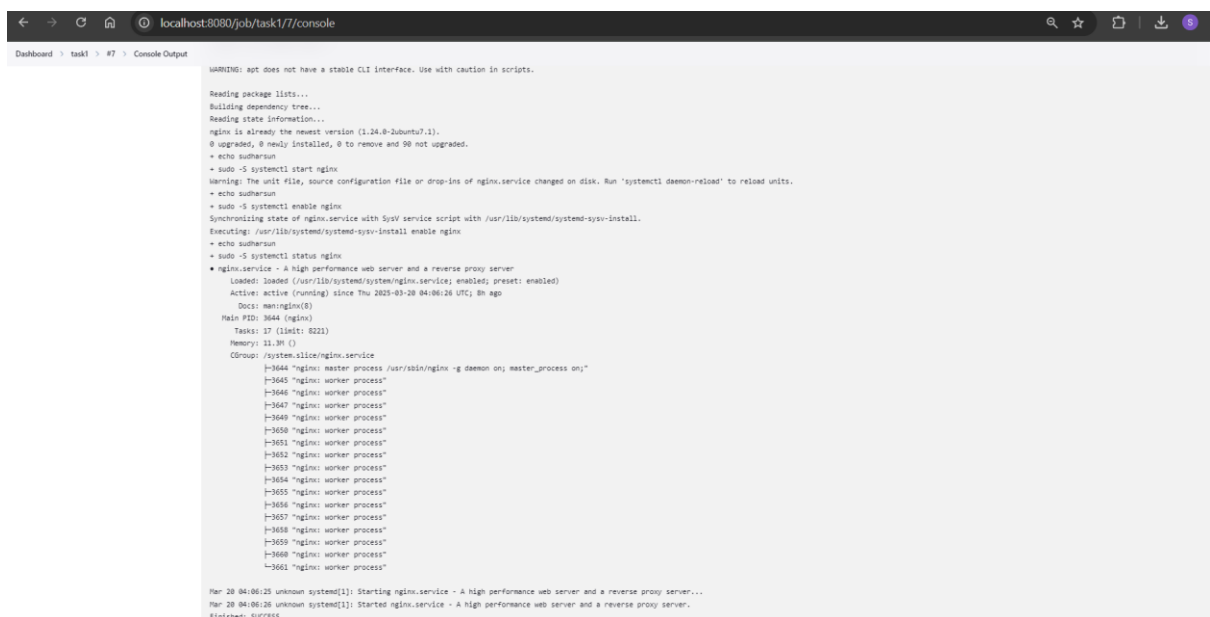


The screenshot shows the Jenkins web interface at localhost:8080/job/task1/7/console. The left sidebar contains navigation links: Status, Changes, Console Output (selected), Edit Build Information, Delete build #7, Timings, and Previous Build. The main area displays the console output for build #7. The output shows the user 'sudharsun m' running as 'SYSTEM' in the workspace '/var/lib/jenkins/workspace/task1'. The build script consists of two commands: 'echo sudharsun' and 'sudo -S apt update -y'. The output of 'sudo -S apt update -y' shows the system's package lists being updated from various Ubuntu mirrors, including the Docker repository. A warning message states: 'WARNING: apt does not have a stable CLI interface. Use with caution in scripts.' The output ends with 'Building dependency tree...' and 'Reading state information...'.

```
Started by user sudharsun m
Running as SYSTEM
Building in workspace /var/lib/jenkins/workspace/task1
[task1] $ /bin/sh -xe /tmp/jenkins338143896608612958.sh
+ echo sudharsun
+ sudo -S apt update -y

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

Hit:1 https://download.docker.com/linux/ubuntu noble InRelease
Ign:2 https://pkg.jenkins.io/debian-stable binary/ InRelease
Get:3 http://security.ubuntu.com/ubuntu noble-security InRelease [126 kB]
Hit:4 https://pkg.jenkins.io/debian-stable binary/ Release
Hit:5 http://archive.ubuntu.com/ubuntu noble InRelease
Get:6 http://archive.ubuntu.com/ubuntu noble-updates InRelease [126 kB]
Get:7 http://security.ubuntu.com/ubuntu noble-security/main amd64 Components [8986 B]
Get:8 http://security.ubuntu.com/ubuntu noble-security/universe amd64 Components [151.9 kB]
Get:9 http://archive.ubuntu.com/ubuntu noble-backports InRelease [126 kB]
Get:10 http://security.ubuntu.com/ubuntu noble-security/restricted amd64 Components [232 B]
Get:11 http://security.ubuntu.com/ubuntu noble-security/multiverse amd64 Components [208 B]
Get:12 http://archive.ubuntu.com/ubuntu noble-updates/main amd64 Packages [702 kB]
Get:13 http://archive.ubuntu.com/ubuntu noble-updates/main amd64 Components [131 kB]
Get:14 http://archive.ubuntu.com/ubuntu noble-updates/universe amd64 Components [364 kB]
Get:15 http://archive.ubuntu.com/ubuntu noble-updates/restricted amd64 Components [212 B]
Get:16 http://archive.ubuntu.com/ubuntu noble-updates/multiverse amd64 Components [1448 B]
Get:17 http://archive.ubuntu.com/ubuntu noble-backports/main amd64 Components [208 B]
Get:18 http://archive.ubuntu.com/ubuntu noble-backports/universe amd64 Components [19.9 kB]
Get:19 http://archive.ubuntu.com/ubuntu noble-backports/restricted amd64 Components [216 B]
Get:20 http://archive.ubuntu.com/ubuntu noble-backports/multiverse amd64 Components [212 B]
Fetched 3288 kB in 6s (242 kB/s)
Reading package lists...
Building dependency tree...
Reading state information...
90 packages can be upgraded. Run 'apt list --upgradable' to see them.
W: https://download.docker.com/linux/ubuntu/dists/noble/InRelease: Key is stored in legacy trusted.gpg keyring (/etc/apt/trusted.gpg), see the DEPRECATION section in apt-key(8) for details.
+ echo sudharsun
+ sudo -S apt install nginx -y
```



The screenshot continues the console output from the previous image. It shows the output of 'sudo -S apt install nginx -y'. The output indicates that nginx is already the newest version (1.24.0-2ubuntu7.1) and that no packages need to be upgraded, removed, or installed. The user 'sudharsun' then runs 'sudo -S systemctl start nginx'. A warning message states: 'Warning: The unit file, source configuration file or drop-ins of nginx.service changed on disk. Run 'systemctl daemon-reload' to reload units.' The user then runs 'sudo -S systemctl enable nginx'. The output shows the state of the nginx.service being synchronized with the systemd service script. The user then runs 'sudo -S systemctl status nginx'. The output shows the status of the nginx.service, indicating it is active (running) since Thu 2023-03-20 04:06:26 UTC; 8h ago. The output also shows the main PID, tasks, memory, and cgroup information for the nginx.service. The output ends with the message 'Finished: SUCCESS'.

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

Reading package lists...
Building dependency tree...
Reading state information...
nginx is already the newest version (1.24.0-2ubuntu7.1).
0 upgraded, 0 newly installed, 0 to remove and 90 not upgraded.
+ echo sudharsun
+ sudo -S systemctl start nginx
Warning: The unit file, source configuration file or drop-ins of nginx.service changed on disk. Run 'systemctl daemon-reload' to reload units.
+ echo sudharsun
+ sudo -S systemctl enable nginx
Synchronizing state of nginx.service with SysV service script with /usr/lib/systemd/systemd-sysv-install.
Executing: /usr/lib/systemd/systemd-sysv-install enable nginx
+ echo sudharsun
+ sudo -S systemctl status nginx
● nginx.service - A high performance web server and a reverse proxy server
   Loaded: loaded (/usr/lib/systemd/system/nginx.service; enabled; preset: enabled)
   Active: active (running) since Thu 2023-03-20 04:06:26 UTC; 8h ago
     Docs: man:nginx(8)
   Main PID: 3644 (nginx)
    Tasks: 17 (limit: 8224)
   Memory: 11.3M (-)
   CGroup: /system.slice/nginx.service
           └─3644 "nginx: master process /usr/sbin/nginx -g daemon on; master_process on;"
             └─3645 "nginx: worker process"
               └─3646 "nginx: worker process"
                 └─3647 "nginx: worker process"
                   └─3648 "nginx: worker process"
                     └─3649 "nginx: worker process"
                       └─3650 "nginx: worker process"
                         └─3651 "nginx: worker process"
                           └─3652 "nginx: worker process"
                             └─3653 "nginx: worker process"
                               └─3654 "nginx: worker process"
                                 └─3655 "nginx: worker process"
                                   └─3656 "nginx: worker process"
                                     └─3657 "nginx: worker process"
                                       └─3658 "nginx: worker process"
                                         └─3659 "nginx: worker process"
                                           └─3660 "nginx: worker process"
                                             └─3661 "nginx: worker process"

Mar 20 04:06:25 unknown systemd[1]: Starting nginx.service - A high performance web server and a reverse proxy server...
Mar 20 04:06:26 unknown systemd[1]: Started nginx.service - A high performance web server and a reverse proxy server.
Finished: SUCCESS
```

## #Welcome Page

