DEVOPS TASK 1

1. Installing Ubuntu

```
surya@Surya: ~
PS C:\Users\SURYA> wsl --install -d Ubuntu-22.04
wsl: Using legacy distribution registration. Consider using a tar based distribution instead.
Installing: Ubuntu 22.04 LTS
Ubuntu 22.04 LTS has been installed.
Launching Ubuntu 22.04 LTS...
Installing, this may take a few minutes...
Please create a default UNIX user account. The username does not need to match your Windows username.
For more information visit: https://aka.ms/wslusers
Enter new UNIX username: surya
New password:
Retype new password:
passwd: password updated successfully
.
Installation successful!
To run a command as administrator (user "root"), use "sudo <command>". See "man sudo_root" for details.
Welcome to Ubuntu 22.04.5 LTS (GNU/Linux 5.15.167.4-microsoft-standard-WSL2 x86_64)
 * Documentation: https://help.ubuntu.com
                     https://landscape.canonical.com
https://ubuntu.com/pro
 * Support:
 System information as of Mon Mar 17 19:29:34 IST 2025
  System load: 0.57
Usage of /: 0.1% of 1006.85GB
                                        Processes:
                                                                  56
                                        Users logged in:
  Memory usage: 5%
                                        IPv4 address for eth0: 172.26.35.228
  Swap usage: 0%
This message is shown once a day. To disable it please create the /home/surya/.hushlogin file.
surya@Surya:~$
```

2. Verify Installation



3. Update package lists

```
🔀 surya@Surya:/mnt/c/Users/S 🛛 🗙
surya@Surya:/mnt/c/Users/SURYA$ sudo apt update -y
Hit:1 http://archive.ubuntu.com/ubuntu jammy InRelease
Get:2 http://security.ubuntu.com/ubuntu jammy-security InRelease [129 kB]
Get:3 http://archive.ubuntu.com/ubuntu jammy-updates InRelease [128 kB]
Get:4 http://security.ubuntu.com/ubuntu jammy-security/main amd64 Packages [2145 kB]
Get:5 http://archive.ubuntu.com/ubuntu jammy-backports InRelease [127 kB]
Get:6 http://security.ubuntu.com/ubuntu jammy-security/main Translation-en [333 kB] Get:7 http://archive.ubuntu.com/ubuntu jammy/universe amd64 Packages [14.1 MB]
Get:8 http://security.ubuntu.com/ubuntu jammy-security/main amd64 c-n-f Metadata [13.5 kB]
Get:9 http://security.ubuntu.com/ubuntu jammy-security/restricted amd64 Packages [2986 kB]
Get:10 http://archive.ubuntu.com/ubuntu jammy/universe Translation-en [5652 kB]
Get:11 http://security.ubuntu.com/ubuntu jammy-security/restricted Translation-en [527 kB]
Get:12 http://security.ubuntu.com/ubuntu jammy-security/restricted amd64 c-n-f Metadata [584 B] Get:13 http://security.ubuntu.com/ubuntu jammy-security/universe amd64 Packages [966 kB] Get:14 http://security.ubuntu.com/ubuntu jammy-security/universe Translation-en [207 kB]
Get:15 http://archive.ubuntu.com/ubuntu jammy/universe amd64 c-n-f Metadata [286 kB]
Get:16 http://security.ubuntu.com/ubuntu jammy-security/universe amd64 c-n-f Metadata [21.6 kB]
Get:17 http://security.ubuntu.com/ubuntu jammy-security/multiverse amd64 Packages [46.6 kB]
Get:18 http://security.ubuntu.com/ubuntu jammy-security/multiverse Translation-en [10.7 kB]
Get:19 http://security.ubuntu.com/ubuntu jammy-security/multiverse amd64 c-n-f Metadata [516 B]
Get:20 http://archive.ubuntu.com/ubuntu jammy/multiverse amd64 Packages [217 kB]
Get:21 http://archive.ubuntu.com/ubuntu
Get:22 http://archive.ubuntu.com/ubuntu
Get:23 http://archive.ubuntu.com/ubuntu
                                                                         jammy/multiverse Translation-en [112 kB]
                                                                           ammy/multiverse amd64 c-n-f Metadata [8372 B]
                                                                         jammy-updates/main amd64 Packages [2388 kB]
jammy-updates/main Translation-en [396 kB]
Get:24 http://archive.ubuntu.com/ubuntu
Get:25 http://archive.ubuntu.com/ubuntu
Get:26 http://archive.ubuntu.com/ubuntu
                                                                         jammy-updates/main amd64 c-n-f Metadata [18.4 kB]
jammy-updates/restricted amd64 Packages [3108 kB]
Get:27 http://archive.ubuntu.com/ubuntu
Get:28 http://archive.ubuntu.com/ubuntu
Get:29 http://archive.ubuntu.com/ubuntu
                                                                         jammy-updates/restricted Translation-en [548 kB]
                                                                          jammy-updates/restricted amd64 c-n-f Metadata [652 B]
                                                                          jammy-updates/universe amd64 Packages [1193 kB]
Get:30 http://archive.ubuntu.com/ubuntu
                                                                           ammy-updates/universe Translation-en [293 kB]
                                                                         jammy-updates/universe amd64 c-n-f Metadata [28.6 kB]
jammy-updates/multiverse amd64 Packages [53.3 kB]
jammy-updates/multiverse Translation-en [13.6 kB]
Get:31 http://archive.ubuntu.com/ubuntu
Get:32 http://archive.ubuntu.com/ubuntu
Get:33 http://archive.ubuntu.com/ubuntu
Get:34 http://archive.ubuntu.com/ubuntu
Get:35 http://archive.ubuntu.com/ubuntu
Get:36 http://archive.ubuntu.com/ubuntu
                                                                          jammy-updates/multiverse amd64 c-n-f Metadata [732 B]
                                                                         jammy-backports/main amd64 Packages [67.7 kB]
jammy-backports/main Translation-en [11.1 kB]
Get:37 http://archive.ubuntu.com/ubuntu
Get:38 http://archive.ubuntu.com/ubuntu
Get:39 http://archive.ubuntu.com/ubuntu
                                                                           ammy-backports/main amd64 c-n-f Metadata [388 B]
                                                                           ammy-backports/restricted amd64 c-n-f Metadata [116 B]
                                                                         jammy-backports/universe amd64 Packages [30.0 kB]
Get:40 http://archive.ubuntu.com/ubuntu jammy-backports/universe Translation-en [16.6 kB]
Get:41 http://archive.ubuntu.com/ubuntu jammy-backports/universe amd64 c-n-f Metadata [672 B]
Get:42 http://archive.ubuntu.com/ubuntu jammy-backports/multiverse amd64 c-n-f Metadata [116 B]
Fetched 15.4 MB in 7s (2101 kB/s)
Reading package lists... Done
Building dependency tree... Done
Reading state information... Done
56 packages can be upgraded. Run 'apt list --upgradable' to see them.
surya@Surya:/mnt/c/Users/SURYA$
```

4. Installing Java (17)

```
Figuring books in /etc/ca-certificates/update.d...

done.

done.

done.

done.

specificates/update.d...

done.

specificates/update.d...

done.

done.

specificates/update.d...

specificates/update.d...

group opengid=17-jr=headless:smd681 (17.8.1817-1-22.88.1) ...

specification of the december of t
```

5. Add the Jenkins repository key

```
X
       surya@Surya: /mnt/c/Users/S ×
     urya@Surya:/mnt/c/Users/SURYA$ wget -q -O- https://pkg.jenkins.io/debian-stable/jenkins.io-2023.key | sudo tee /usr/share/keyrings
 keyring.asc > /dev/null
----BEGIN PGP PUBLIC KEY BLOCK-
mQINBGQhzisBEAC7yUhIqVCcyCXJWeZZf/BA6/+KguDQpycck0xUomj5ogT1+lwJ
Mnr6XsPFdTt5DgzjHKg6SM8PTIpLpzOcpqIG9eB8MnvtTp6qFSfIdZnEZccTotle
cArnM2H6yW/4U0H8QHx9ZgjlmiiqolVZ1RusHT3cvPdkF4GFTZnChiF0epd+6iKi
Em8gfzECItl+MeVCwpPyLX38plmwPI0tgQ7GGD1VzjS/GycuD+shM7lPQPPMCnC
8zkZIBsbGbSTbAYqnARrbczmg9BKCyErfdQJKi6+r/fg6cWAairXsiOlzqCLCBoZ
ssLKkRAc2ib3cm/RHBm+MK2W.LZ5q8xgh9e/iBoB0pJXXARvfu67uQjfLPj/o4FwM
ZWx6Zlj2b3cL5q+thjGWOliEh15gciGUJ7VT15YGCEPVMeDVBYKp/Z+TgkJILVmD
4bU+K89qYCzp/AP3tsozFwazQRultkjuHVCZrJQtCaVu3/wjtkVd1010j/Gi4ajn
ZWUZKKGWkM0iArUCohJPsZodLHi8DAT2VSSgrEg6iF6ONnAlkIMMNPTKAODmP6LJ
 2WU2KkGWkM0jArUCohJPsZodLHj8DAT2V5SqrEq6jF6ONnAlK1MNmPTKAoDmP6LJ
3of4VHcIbGq1p+16R9292Lv3Avs/uMbWtR7nae4XWT9l49hY3p8gc5rPOs2wzPgV
v8X6vaQSlgjJDaNVPSZCo8hQkqHsoskri5BHVhxBpjaJ0mNKCeSHWfP+RwARAQAB
v8X6vaqSlgjjDaNVPSZCo8hQkqHsoskri5BHVhxBpjaJ0mNKccsHWfP+RwARAQAB
tDJKZW5raW5zIFByb2plY3QgPGplbmtpbnNjaSlib2FyZEBnb29nbGVncm9lcHMu
Y29tPokCVmQTAQgAQRYhBGNmfudLuhBKCKaYclujHVfvWXXKBQJkIc4rAhsDBQkF
05qABQsJCAcCAiICBhUKCQgLAgQWAgMBAh4HAheAAAOJEFujHVfvWXXK4+kP/0cR
nNYrjb4gMG/rcwJ8zo0YKZB030RPullINnyufDediDb0UCOJWT+CnEZULx+HeUOI
xHVBMD70LRP3ym+4H0Naw354nJ0wBpOYIqQhjoRqrWkdIrMgNSaWRrufQxGSBVvfZ
+xQYrNRuu8/00U6Bz2eeCL2SNZpShL0iPjP9Bcu7763jaGvnS/WUVaAqqyNwxGRl
afffRvcV/Wjy4TW+ifCPgku4SKZgG+QPMuth1842+lLs12BXhiEVJ4auK5rjFHsv
RTUEQrjEGZ9VEoitZAQL/CDWmlkhrqYSpgTVsMCoByRzZqQG9f0AJNFniFqrANQQ
m9NkZNOZljOnZfJh+ZzbjJVUS52ZpiJtVqdOU0noT6awMtS0/CO4EmuEljBLkVI6
jbP0FqxYecNQtlAzBguRDSUWjAi3jgkdbap0ooqZm2YQPNaLD30LWdvtj/jx+EI4
DTrSoSSoHea5xiAFQNB3ab2fk5kNSufVWIV5F9AQHU+kWE9jgS+zl8apzbwMinm8
ZW0HCELW63MHShvbmsfBjdyroTTV2mmyv096mB2vyqwWv6nt9m0y1YCmBevp7oshI
 ZW0KeIcW63MH5hvbmsfBjdyroTTy2mwy096mB2vvqwWv6nt9mQy1YCmBeyp7oshIqNeXIunP1NekAfGY+dRlldA3SoxNuJhVGd5eC0FWYmipb9XD+JrSgncHjCgewHq1
 ycptdm1q80Z26Z0aAIVOYENk8WUOz5DzOuOS81EJuQINBGQhzisBEADtvyAOnz23
  gKKKVzSY9bhEvQxJWQUY/jXek7LjhflLw4xugGARMrTMcGzzabOJefyrVkucWqso
spCWoj+M8HGfhHXpNDHbn21fyHB6jpOh8Ors2ZHH2skswcAcWcLlWQWrUtqQFuje
1rXShp8IhYz308MIZ65VYf/Z9Bk7VNNTgRLmOMTn+KlN8qiQZOSZbPj/wFK1iwAh
  /xPu586a7xVN4xdy6RJNfrSCG84kMNyaHTDF0EKchWPoGe5D6EqF8dufvrcKoSxc
T2sC6WzDqG/+Jfk//xrHblxeCXiOAX/Dm+McvceV0dBSVJJx67FoHUyWBRj5coHU
 4YfrUTHREEKdYcpUAHQGPJBLyx0QNs2URHYSCmNU5yYL+z3UIps593HosUPEzrTD
XEID2eVlgGf0YzCWxWTAu0joUD8D22p//GAaLXYpuwSgVzgKwvPefkWJ94Euvz6T
sKrljMPsxOdPLBs8AJgrqmYIwbRXoxNEzv/PT/9sST5nl5tlWc9PonzwzHqStU4Y
 fBjQhIvJyq2wAE2OB9Q7B6i62QWqSWAWEAc6LPRdSalgSBooj/MIQFGwsdHvWNSN
JD9p7bHHLHceeXMR2F0JeG8G91RqlTkxu7cUMkqheXXAyTa/OuG5xauHyLzt4xVp
fnHd5fNjxcc02ADF46X6/nze6hClUBqMAQARAQABiQI8BBgBCAAmFiEEY2Z+50u6
 HwoIpphyW6MdV+9ZdcoFAmQhzisCGwwFCQWjmoAACgkQW6MdV+9ZdcoRGA/+JmjW
09ZmAlBM846Gg10B00YtXMu3PuhhOq8sJEXvcvlCfSAlVpHfnwUJE7q5QaUrD3wT
VKT4pe/zBRN+zD84gXxGANJY813EhpngBEJmptIjNkKvWclr/nG4MI8yezZmeEgP
 142LviJmNYb0+3s1CU7Q03g3b/wsHNFpuA9zVJu24xVAM/Af65N1STvnSQAjcXa9
rgIwdiZ7XbCD6rpF1ms8i6RYsflB+dGLgE0iAlX+lZ6843WpMWlDUBd2v+OHtXvm
zLYbg8SYtHV8xMJWPjz6e9yoKuyjvWAwAiOcj00SpCqlkHsUzWRS44z3hQssgywP
TFKGqP5eHDaSCqUHF5VkGdtg/a9M7vthhEoB/21KSf82CQE9IdmNtEJHAPgWamgm
VPpyMLiDTd2gyqD+FmduRdY/yHMP0QV6G/VRTV4gfQ80qU/U2JXWAQdwGokl+k5V
t0ur8buQo+49diyr8WPHA4CwpSwriwIClDZdq38JiCdnfICfFxAQVdBMbL654wqA
Sv+OqcDbvu7m5yV/hrfcVztRkWUwr21kUmvx04xpvvpG/cUAnQ0og3Q7Ce5xkaX7
99Ewd0xUXma/H++IGX77jxU7jW5n2FPeVEn+zcNF8of/XAiluaPlWL5T/iEl6EsI
   letBbjkOnNXyWrP3SAPwqQMMg/vNa+mJIjoNByw=
    sdsH
                -END PGP PUBLIC KEY BLOCK-
   keyring.asc: command not found
surya@Surya:/mnt/c/Users/SURYA$ echo "deb [signed-by=/usr/share/keyrings/jenkins-keyring.asc] https://pkg.jenkins.io/debian-stable
  sudo tee /etc/apt/sources.list.d/jenkins.list > /dev/null
surya@Surya:/mnt/c/Users/SURYA$ |
```

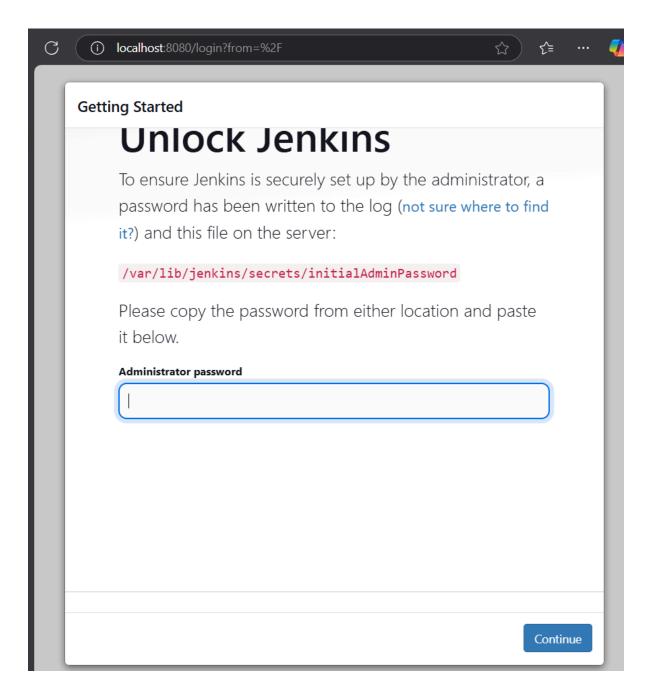
6. Installing Jenkins

```
surya@Surya:/mnt/c/Users/SURYA$ sudo apt install -y 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 56 not upgraded.
Need to get 95.0 MB of archives.
After this operation, 97.6 MB of additional disk space will be used.
Get:2 http://archive.ubuntu.com/ubuntu jammy/main amd64 net-tools amd64 1.60+git20181103.0eebece-lubuntu5 [204 kB]
Get:1 https://pkg.jenkins.io/debian-stable binary/ jenkins 2.492.2 [94.8 MB]
Fetched 94.9 MB in 7s (14.2 MB/s)
Selecting previously unselected package net-tools.
(Reading database ... 44460 files and directories currently installed.)
Preparing to unpack .../net-tools_1.60+git20181103.0eebece-lubuntu5_...
Selecting previously unselected package jenkins.
Preparing to unpack .../jenkins_2.492.2_all.deb ...
Unpacking net-tools (1.60+git20181103.0eebece-lubuntu5) ...
Selecting up net-tools (1.60+git20181103.0eebece-lubuntu5) ...
Setting up net-tools (1.60+git20181103.0eebece-lubuntu5) ...
Setting up penkins (2.492.2) ...
Setting up penkins (2.492.2) ...
Setting up inenkins (2.492.2) ...
```

7. Start, enable and Check Jenkin status

```
Surya@Surya:/mnt/c/Users/SURYA$ sudo systemctl start jenkins
surya@Surya:/mnt/c/Users/SURYA$ sudo systemctl enable jenkins
Synchronizing state of jenkins.service with SysV service script with /lib/systemd/systemd-sysv-install.
Executing: /lib/systemd/systemd-sysv-install enable jenkins
Synchronizing interval of jenkins. Service with SysV service script with /lib/systemd/systemd-sysv-install.
Executing: /lib/systemd/systemd-sysv-install enable jenkins
spinkins.service — Jenkins Continuous Integration Server
Loaded: loaded (/lib/systemd/system/jenkins.service; enabled; vendor preset: enabled)
Active: active (running) since Mon 2025-03-17 19:53:01 IST; 2min 16s ago
Main PDI #US80 (java)
Tasks: 53 (limit: 9428)
Memory: 987.2M
CGroup: /system.slice/jenkins.service
L4580 /usr/bin/java —Djava.awt.headless=true —jar /usr/share/java/jenkins.war —webroot=/var/cache/jenkins/war —htt
Mar 17 19:52:55 Surya jenkins[4580]: 31658648d958454928ed6608086d611e
Mar 17 19:52:55 Surya jenkins[4580]: 31658658593454928ed6608086d611e
Mar 17 19:52:55 Surya jenkins[4580]: 31658648058454928ed6608086d611e
Mar 17 19:52:55 Surya jenkins[4580]: 3205-03-17 14:23:01.910000 [id=32] INFO hudson.lifecycle.lifecycle5onReady: Jenkins[4580]: 3205-03-17 14:23:01.910000 [id=32] INFO hudson.lifecycle.lifecycle5onReady: Jenkins[4580]: 3205-03-17 14:23:01.910000 [id=62] INFO hudson.util.Retrier#start: Performed lines 1-19/19 (END)
```

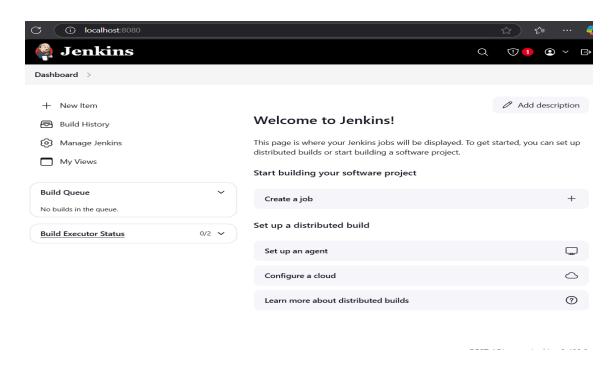
8. Testing using loalhost 8080



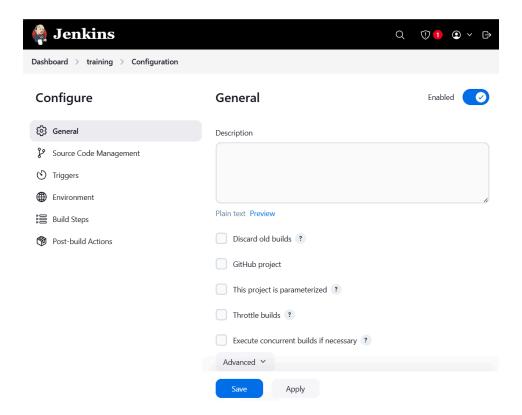
9. Getting Password

surya@Surya:/mnt/c/Users/SURYA\$ sudo cat /var/lib/jenkins/secrets/initialAdm inPassword 316b8fd8d958454e928ed608086d611e surya@Surya:/mnt/c/Users/SURYA\$

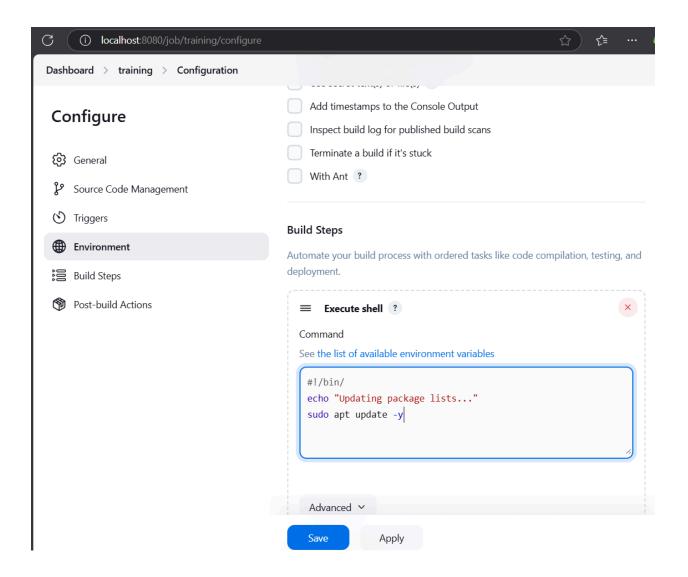
10. Jenkins dashBoard



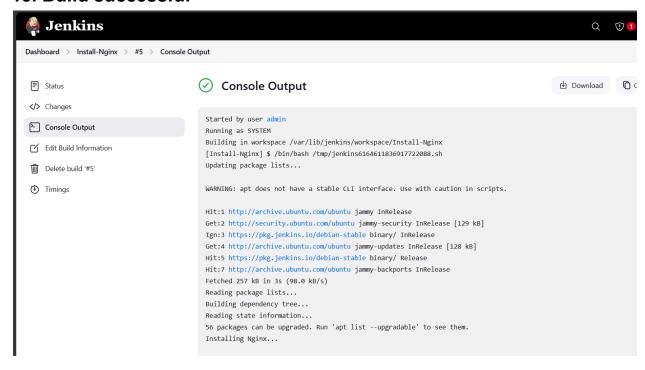
11. Free style project created (training)



12. Execute shell



13. Build successful



14. Verifying the installation

15. Nginix page

hostname -I // command for getting host ip

http://ip/80

