

# TASK-1 FOR DEVOPS

- 1) Installation for Java is required for Jenkins

## Command

```
sudo apt update
```

```
sudo apt install fontconfig openjdk-17-jre
```

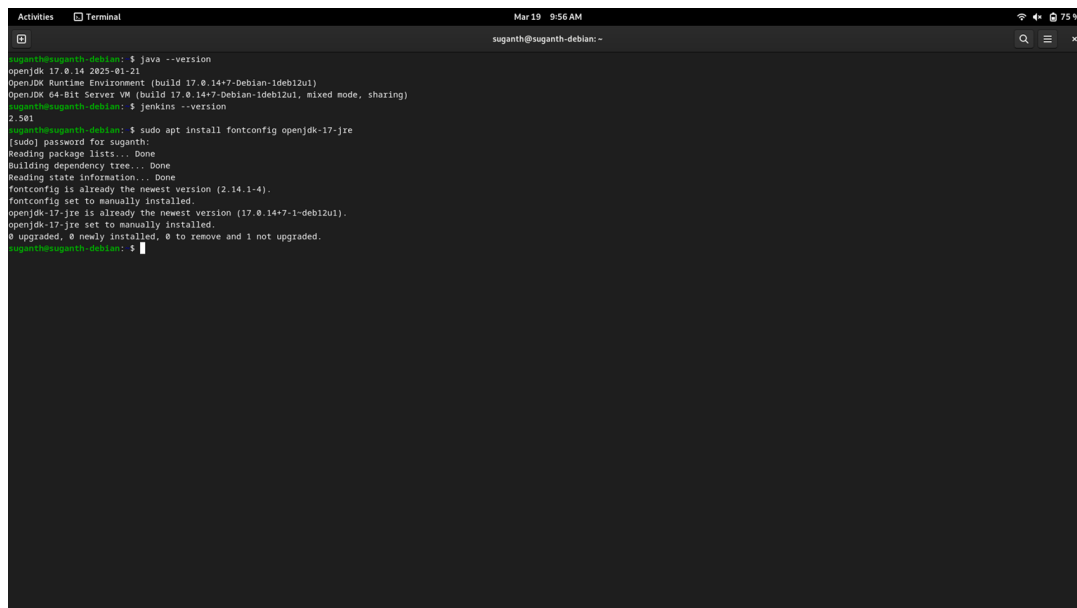
```
java -version
```

```
openjdk version "17.0.13" 2024-10-15
```

```
OpenJDK Runtime Environment (build 17.0.13+11-Debian-2)
```

```
OpenJDK 64-Bit Server VM (build 17.0.13+11-Debian-2, mixed mode, sharing)
```

## Screenshot:



```
Activities Terminal Mar 19 9:56 AM suganth@suganth-debian: -
suganth@suganth-debian: $ java --version
openjdk 17.0.14 2023-01-21
OpenJDK Runtime Environment (build 17.0.14+7-Debian-1deb12u1)
OpenJDK 64-Bit Server VM (build 17.0.14+7-Debian-1deb12u1, mixed mode, sharing)
suganth@suganth-debian: $ java --version
2.501
suganth@suganth-debian: $ sudo apt install fontconfig openjdk-17-jre
[sudo] password for suganth:
Reading package lists... Done
Building dependency tree... Done
Reading state information... Done
fontconfig is already the newest version (2.14.1-4).
fontconfig set to manually installed.
openjdk-17-jre is already the newest version (17.0.14+7-1-deb12u1).
openjdk-17-jre set to manually installed.
0 upgraded, 0 newly installed, 0 to remove and 1 not upgraded.
suganth@suganth-debian: $
```

The Java JDK has been successfully installed.

- 2) Install Jenkins

## Command:

```
sudo wget -O /usr/share/keyrings/jenkins-keyring.asc \
```

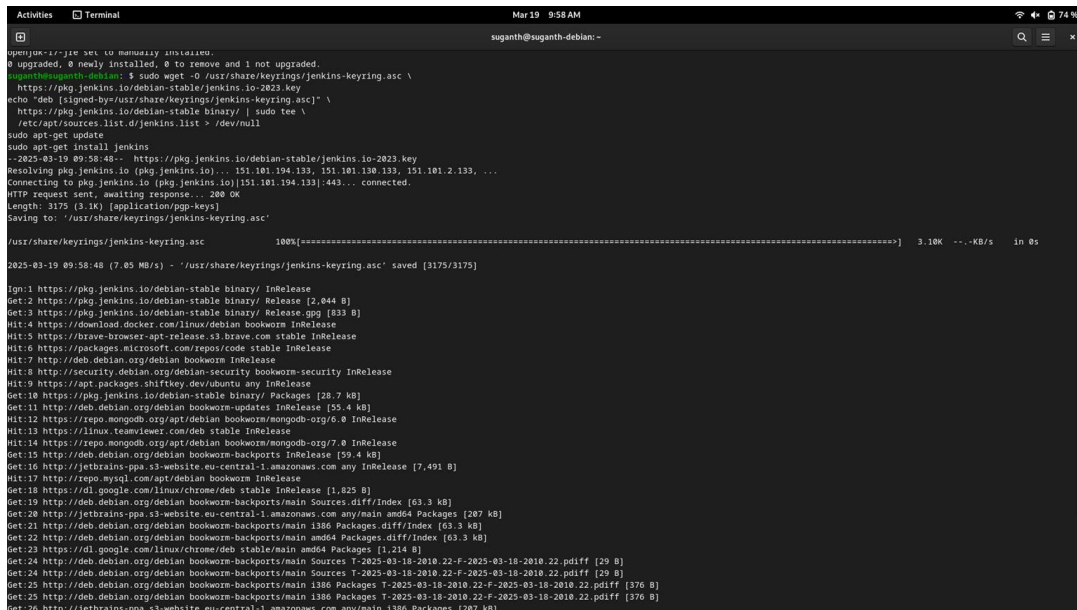
```
https://pkg.jenkins.io/debian-stable/jenkins.io-2023.key
```

```
echo "deb [signed-by=/usr/share/keyrings/jenkins-keyring.asc]" \
```

```
https://pkg.jenkins.io/debian-stable binary/ | sudo tee \
/etc/apt/sources.list.d/jenkins.list > /dev/null

sudo apt-get update
sudo apt-get install jenkins
```

## Screenshot:



```
Activities Terminal Mar 19 9:58 AM
suganth@suganth-debian: ~
openjdk-11-jre set to manually installed.
0 upgraded, 0 newly installed, 0 to remove and 1 not upgraded.
suganth@suganth-debian: ~$ sudo wget -O /usr/share/keyrings/jenkins-keyring.asc \
https://pkg.jenkins.io/debian-stable/jenkins.io-2023.key
echo "deb [signed-by=/usr/share/keyrings/jenkins-keyring.asc]" \
https://pkg.jenkins.io/debian-stable binary/ | sudo tee \
/etc/apt/sources.list.d/jenkins.list > /dev/null
sudo apt-get update
sudo apt-get install jenkins
2025-03-19 09:58:48- https://pkg.jenkins.io/debian-stable/jenkins.io-2023.key
Resolving pkg.jenkins.io (pkg.jenkins.io)... 151.101.194.133, 151.101.130.133, 151.101.2.133, ...
Connecting to pkg.jenkins.io (pkg.jenkins.io)[151.101.194.133]:443... connected.
HTTP request sent, awaiting response... 200 OK
Length: 3175 (3.1K) [application/pgp-keys]
Saving to: '/usr/share/keyrings/jenkins-keyring.asc'

/usr/share/keyrings/jenkins-keyring.asc 100%[=====] 3.10K --.-KB/s in 0s
2025-03-19 09:58:48 (7.05 MB/s) - '/usr/share/keyrings/jenkins-keyring.asc' saved [3175/3175]

Ign:1 https://pkg.jenkins.io/debian-stable binary/ InRelease
Get:2 https://pkg.jenkins.io/debian-stable binary/ Release [2,044 B]
Get:3 https://pkg.jenkins.io/debian-stable binary/ Release.gpg [833 B]
Hit:4 https://download.docker.com/linux/debian bookworm InRelease
Hit:5 https://brave-browser-apt-release.s3.brave.com stable InRelease
Hit:6 https://packages.microsoft.com/repos/code stable InRelease
Hit:7 http://deb.debian.org/debian bookworm InRelease
Hit:8 http://security.debian.org/debian-security bookworm-security InRelease
Hit:9 https://apt.packages.shirkey.dev/ubuntu any InRelease
Get:10 https://pkg.jenkins.io/debian-stable binary/ Packages [28.7 kB]
Get:11 http://deb.debian.org/debian bookworm-updates InRelease [55.4 kB]
Hit:12 https://repo.mongodb.org/apt/debian bookworm/mongodb-org/6.0 InRelease
Hit:13 https://linux.teamviewer.com/deb stable InRelease
Hit:14 https://repo.mongodb.org/apt/debian bookworm/mongodb-org/7.0 InRelease
Get:15 http://deb.debian.org/debian bookworm-backports InRelease [59.4 kB]
Get:16 http://deb.debian.org/debian bookworm-backports/main Sources [207 kB]
Hit:17 http://repo.mysql.com/apt/debian bookworm InRelease
Get:18 https://dl.google.com/linux/chrome/deb stable InRelease [1,025 B]
Get:19 http://deb.debian.org/debian bookworm-backports/main Sources.diff/Index [63.3 kB]
Get:20 http://deb.debian.org/debian bookworm-backports/main Sources [207 kB]
Get:21 http://deb.debian.org/debian bookworm-backports/main Sources.diff/Index [63.3 kB]
Get:22 http://deb.debian.org/debian bookworm-backports/main amd64 Packages.diff/Index [63.3 kB]
Get:23 https://dl.google.com/linux/chrome/deb stable/main amd64 Packages [1,214 B]
Get:24 http://deb.debian.org/debian bookworm-backports/main Sources T-2025-03-18-2010.22-F-2025-03-18-2010.22.pdiff [29 B]
Get:25 http://deb.debian.org/debian bookworm-backports/main Sources T-2025-03-18-2010.22-F-2025-03-18-2010.22.pdiff [29 B]
Get:26 http://deb.debian.org/debian bookworm-backports/main Sources T-2025-03-18-2010.22-F-2025-03-18-2010.22.pdiff [376 B]
Get:27 http://deb.debian.org/debian bookworm-backports/main Sources T-2025-03-18-2010.22-F-2025-03-18-2010.22.pdiff [376 B]
```

Jenkins has been successfully installed.

Now got to the Jenkins page in the browser by running localhost:8080 and login with your credentials.

Getting Started

Unlock Jenkins

To ensure Jenkins is securely set up by the administrator, a password has been written to the log (not sure where to find it?) and this file on the server:

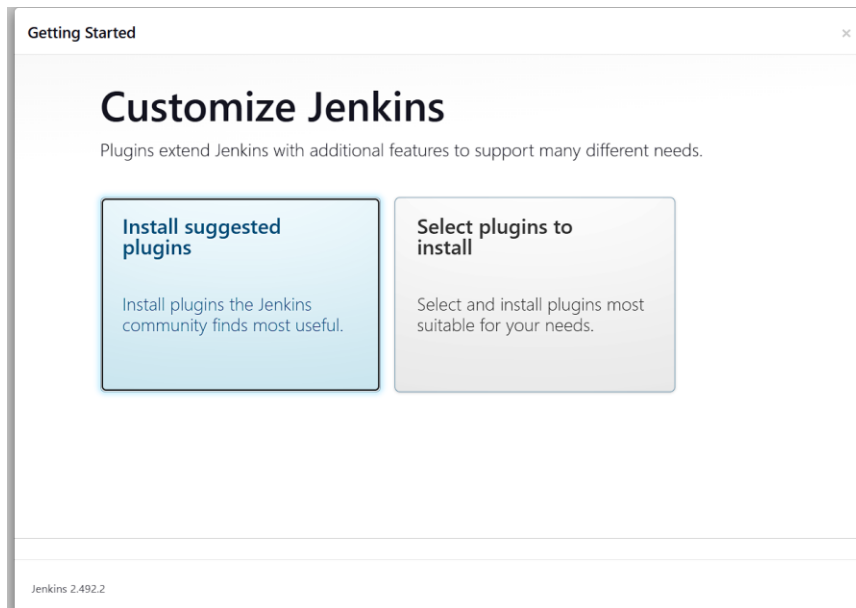
`/var/lib/jenkins/secrets/initialAdminPassword`

Please copy the password from either location and paste it below.

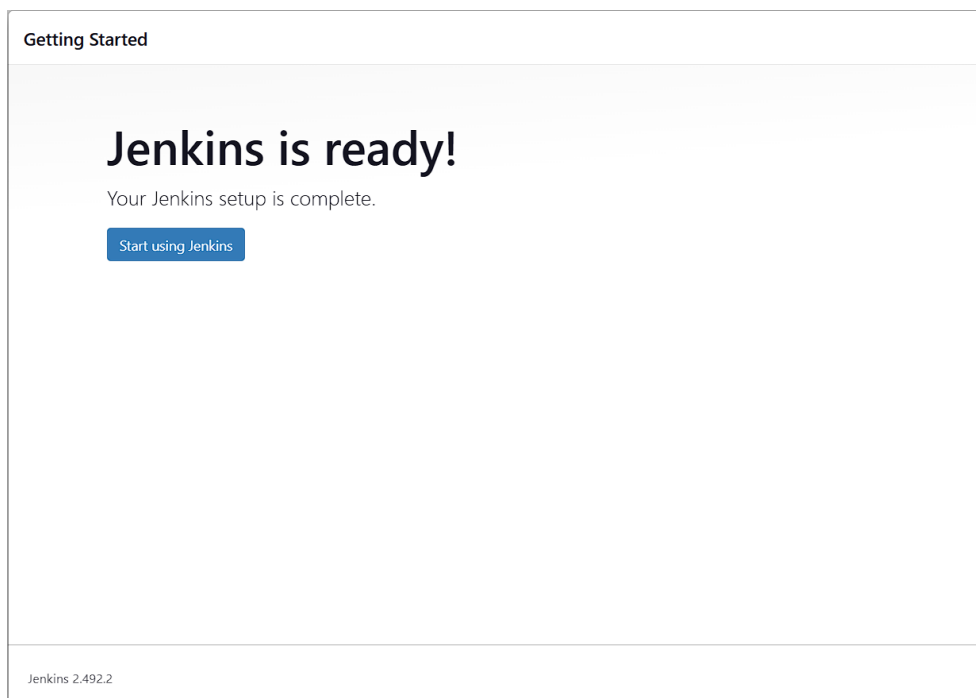
Administrator password

Continue

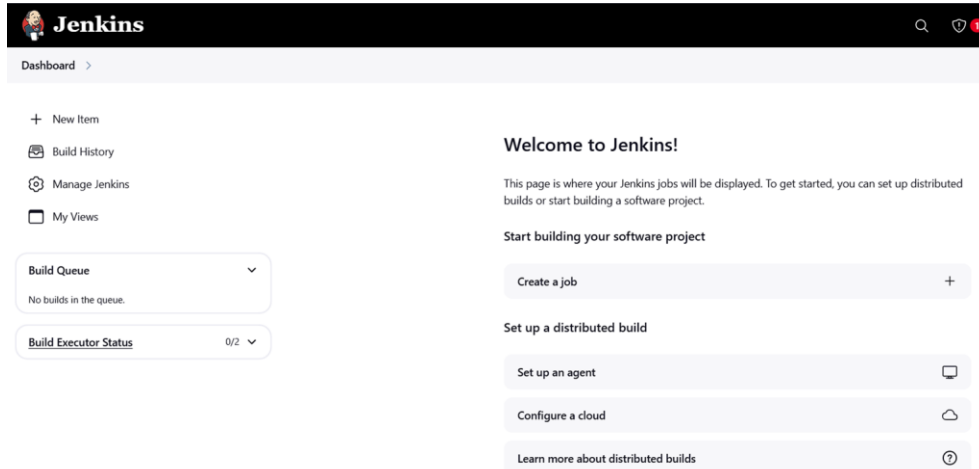
### 3) Install the Suggested plugins required and followed by Creating the First Admin User



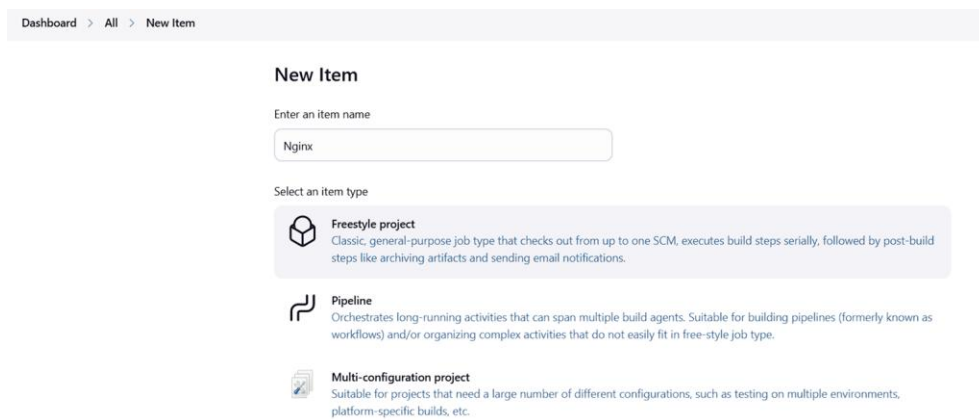
Now Jenkins is ready to use



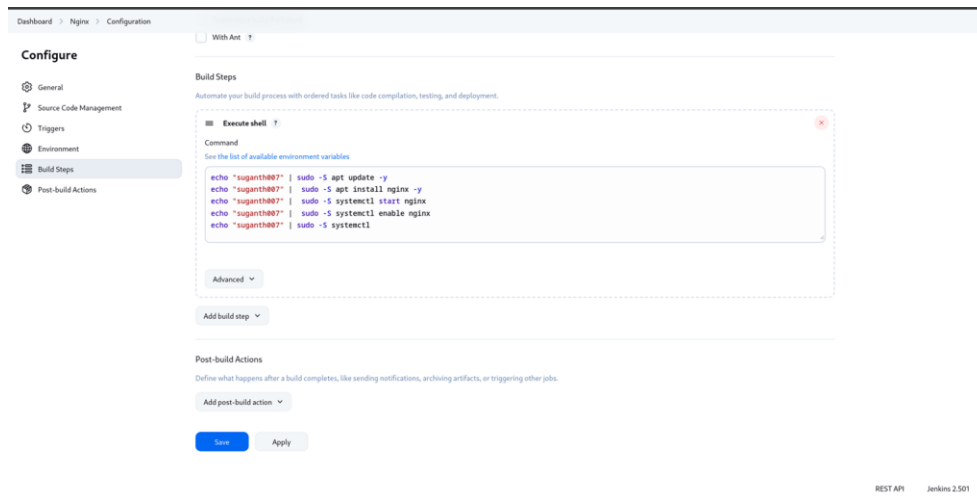
#### 4) Now create a new item



Give an item name and select the item type as free-style project



## 5) Build the steps using the commands



## 6) After the successful compilation of the build, Nginx will be opened in localhost, once the Ip address is given

