

## GUVI JENKINS

03.02.2025

Task Explanation: Create a simple FreeStyle Job To Install Nginx on your server  
(tools:jenkins, ubuntu vm)

Step 1: Create and navigate to the guvi directory

```
mkdir guvi
```

```
cd guvi
```

Step 2: List the contents to confirm the directory is empty

```
ls
```

Step 3: Update the system packages

```
sudo apt update
```

Step 4: Install Java (OpenJDK 17)

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

Step 5: Verify Java installation

```
java -version
```

Step 6: (Note: 'Java -version' should be 'java -version')

This step is redundant, but corrected for syntax

```
java -version
```

Step 7: Add Jenkins repository key and source

```
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
```

Step 8: Update package list and install Jenkins

```
sudo apt-get update
```

```
sudo apt-get install -y Jenkins
```

Step 9: Retrieve the initial admin password for Jenkins setup

```
sudo cat /var/lib/jenkins/secrets/initialAdminPassword
```

Step 10: Create a new directory for task1 and add description

```
mkdir task1
```

```
echo "This is Task 1 for Jenkins in the guvi directory." > task1/description.txt
```

```
root@SUBIKSHA:/home/subiksha_ubuntu# cd /var/lib/jenkins/workspace/Task\ 1
root@SUBIKSHA:/var/lib/jenkins/workspace/Task 1# ls
sample
root@SUBIKSHA:/var/lib/jenkins/workspace/Task 1# exit
exit
```

### ✓ Console Output

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```
Started by user subiksha rameshkanna
Running as SYSTEM
Building in workspace /var/lib/jenkins/workspace/Task 1
[Task 1] $ /bin/sh -xe /tmp/jenkins8933512339452496630.sh
+ mkdir sample
Finished: SUCCESS
```

S	W	Name ↓	Last Success	Last Failure	Last Duration	
✓	☀	Task 1	1 hr 51 min #1	N/A	91 ms	▶
✓	☁	Task2	4 min 40 sec #7	1 hr 29 min #5	1 min 25 sec	▶

Step 11: Task 2 - Uninstall NGINX and install using Jenkins

Uninstall NGINX

```
sudo systemctl disable nginx
```

```
sudo systemctl stop nginx
```

```
sudo apt remove nginx -y
```

```
sudo apt purge nginx nginx-common -y
```

```
sudo apt autoremove -y
```

```
sudo apt autoclean
```

To check if correctly uninstalled

```
subiksha_ubuntu@SUBIKSHA:~$ nginx -v
Command 'nginx' not found, but can be installed with:
sudo apt install nginx
```

## Install NGINX using Jenkins

### Create Task2 in Jenkins

Go to 'Execute Shell' and add the following commands:

```
sudo apt update -y && sudo apt upgrade -y
sudo apt install -y nginx
sudo systemctl start nginx
sudo systemctl enable nginx
sudo cp /home/subiksha_ubuntu/indexsubi.html /var/www/html/index.nginx-
debian.html
sudo systemctl restart nginx
```

Modify sudoers file using visudo:

Add the following line near 'root ALL=(ALL:ALL) ALL'

jenkins ALL=(ALL) NOPASSWD:ALL

Finally, click 'Build Now' in Jenkins to execute the task.

### Task2

[Add description](#)

#### Permalinks

- [Last build \(#7\), 10 min ago](#)
- [Last stable build \(#7\), 10 min ago](#)
- [Last successful build \(#7\), 10 min ago](#)
- [Last failed build \(#5\), 1 hr 34 min ago](#)
- [Last unsuccessful build \(#5\), 1 hr 34 min ago](#)
- [Last completed build \(#7\), 10 min ago](#)

```
subiksha_ubuntu@SUBIKSHA:~$ sudo visudo
subiksha_ubuntu@SUBIKSHA:~$ nginx -v
nginx version: nginx/1.24.0 (Ubuntu)
subiksha_ubuntu@SUBIKSHA:~$ sudo su
[sudo] password for subiksha_ubuntu:
root@SUBIKSHA:/home/subiksha_ubuntu# touch indexsubi.html
root@SUBIKSHA:/home/subiksha_ubuntu# nano indexsubi.html
root@SUBIKSHA:/home/subiksha_ubuntu# pwd
/home/subiksha_ubuntu
root@SUBIKSHA:/home/subiksha_ubuntu# |
```

S	W	Name	Last Success	Last Failure	Last Duration
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