

# TASK 1-JENKINS (Installing and setting up Jenkins on a Linux machine)

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## STEPS:

1. Install Jenkins using the following commands.

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

2. Log in to Jenkins.

3. Create a Freestyle project by clicking on "New Item," entering an item name (e.g., "Sample"), selecting "Freestyle Project," and clicking "OK."

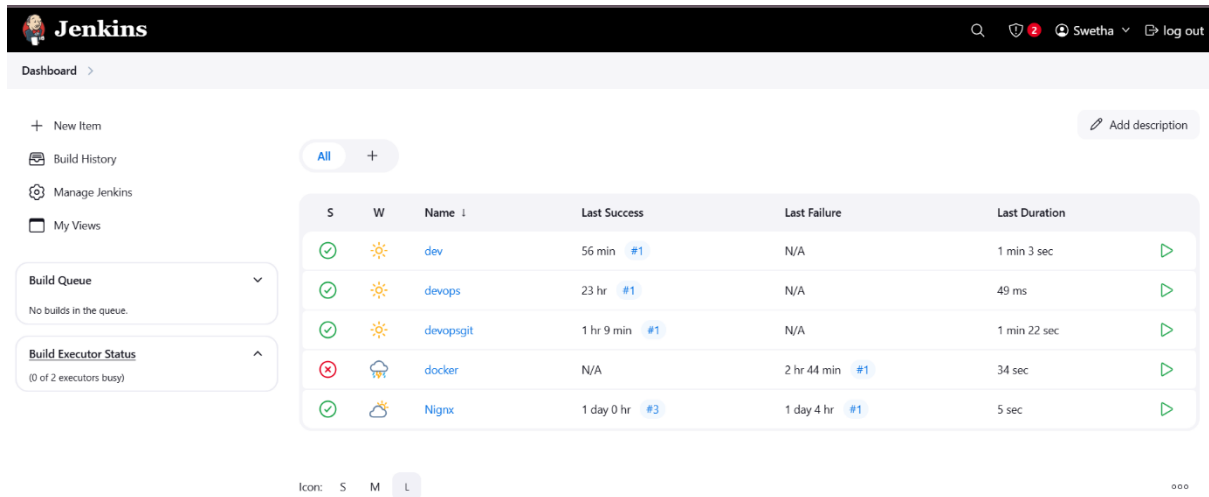
4. Configure the job to install NGINX by clicking "Add Build Step," then selecting "Execute Shell" to run shell commands.

5. Save the job and click "Build Now" to execute it.

6. You can view the output in the "Console Output" section.

7. Verify the NGINX installation by checking your browser

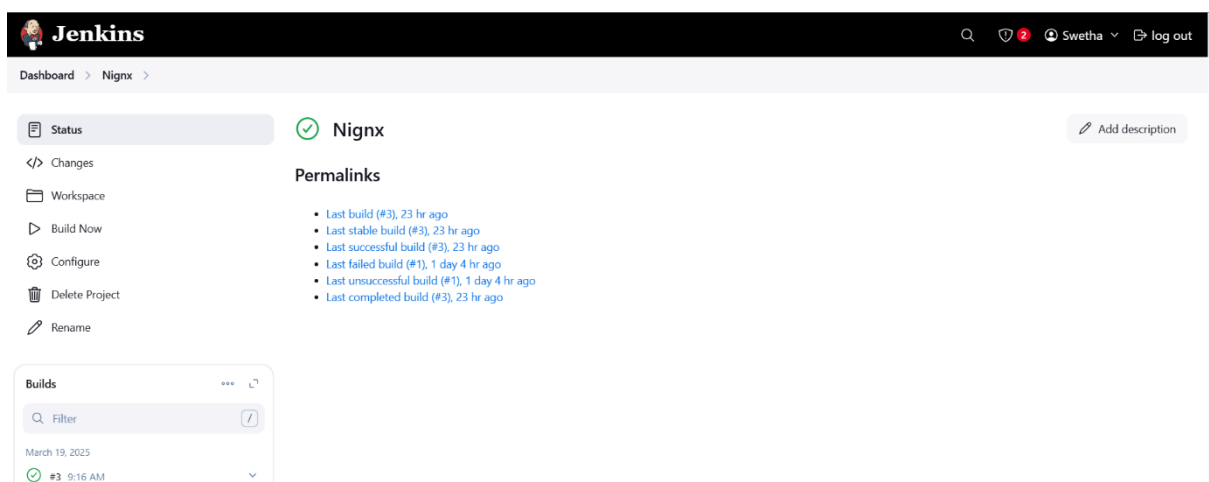
**Step 1:** Login to the Jenkins page and create a Nginx item by using the new item in the dashboard after that give the description by writing the commands.



The screenshot shows the Jenkins Dashboard. The top navigation bar includes the Jenkins logo, a search icon, a shield icon with a red '2', the user name 'Swetha', and a 'log out' button. Below the navigation bar, the 'Dashboard' breadcrumb is visible. On the left sidebar, there are links for 'New Item', 'Build History', 'Manage Jenkins', and 'My Views'. The main content area features a table with columns: 'S', 'W', 'Name', 'Last Success', 'Last Failure', and 'Last Duration'. The table lists several items: 'dev', 'devops', 'devopsgit', 'docker', and 'Nignx'. The 'Nignx' item is highlighted with a green checkmark and a duration of 5 sec. Below the table, there are tabs for 'S', 'M', and 'L', and a 'More' button (three dots).

S	W	Name	Last Success	Last Failure	Last Duration
✓	☀	dev	56 min #1	N/A	1 min 3 sec
✓	☀	devops	23 hr #1	N/A	49 ms
✓	☀	devopsgit	1 hr 9 min #1	N/A	1 min 22 sec
✗	☁	docker	N/A	2 hr 44 min #1	34 sec
✓	☀	Nignx	1 day 0 hr #3	1 day 4 hr #1	5 sec

**Step 2:** After the commands given give save and apply and then give build now



The screenshot shows the Jenkins configuration page for the 'Nignx' item. The top navigation bar is the same as the dashboard. The breadcrumb is 'Dashboard > Nignx'. The left sidebar contains links for 'Status', 'Changes', 'Workspace', 'Build Now', 'Configure', 'Delete Project', and 'Rename'. The main content area shows the 'Nignx' item with a green checkmark and a description field. Below the description, there is a 'Permalinks' section with a list of links for various build states. At the bottom, there is a 'Builds' section with a filter input and a list of builds, including a build from March 19, 2025, at 9:16 AM.

**Status** ✓ Nignx Add description

**Permalinks**

- Last build (#3), 23 hr ago
- Last stable build (#3), 23 hr ago
- Last successful build (#3), 23 hr ago
- Last failed build (#1), 1 day 4 hr ago
- Last unsuccessful build (#1), 1 day 4 hr ago
- Last completed build (#3), 23 hr ago


**Builds**

Filter

March 19, 2025

- ✓ #3 9:16 AM

## Step 3: Verify the output in console output:

 **Jenkins**

Dashboard > Nginx > #3

Status

</> Changes

Console Output

Edit Build Information

Delete build '#3'

Timings

Previous Build

✓ #3 (Mar 19, 2025, 9:16:51 AM)

Started by user [Swetha](#)

This run spent:

- 46 ms waiting;
- 5 sec build duration;
- 5.1 sec total from scheduled to completion.

</> No changes.

Add description

Keep this build forever

Started 1 day 0 hr ago  
Took [5 sec](#)

REST API    Jenkins 2.492.2