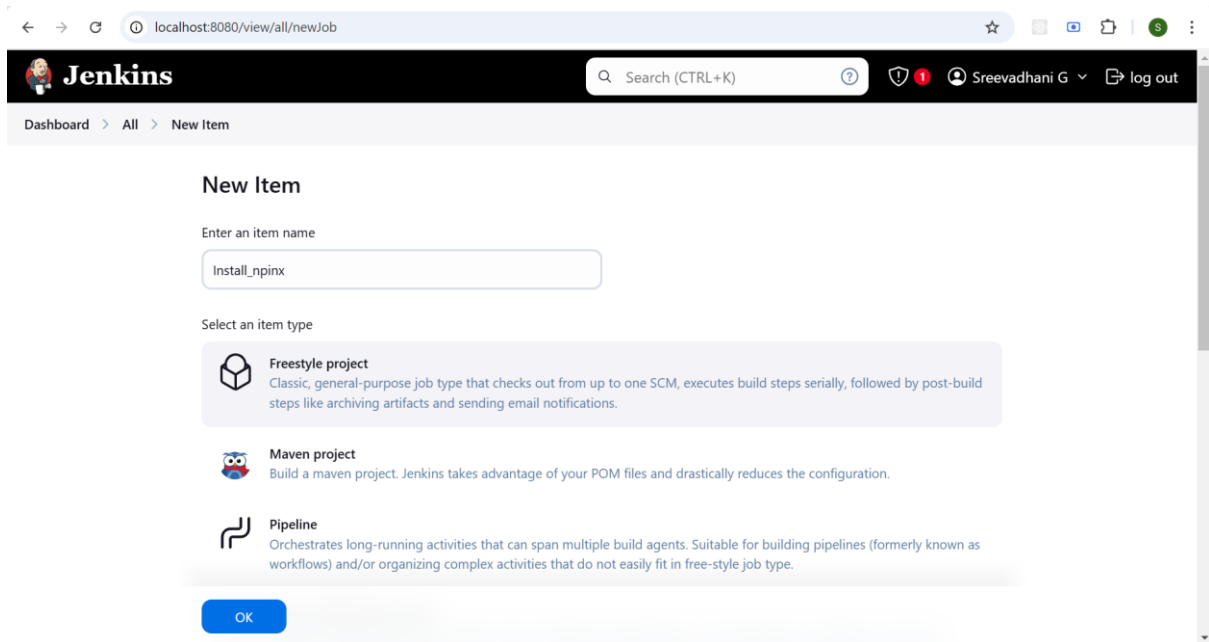


TASK 1: JENKINS

Step 1: Create a new freestyle project named “Install_npinx”



Step 2: Create a directory “/var/lib/jenkins/workspace/html_files” and create index.html file in it

```
sree_ubuntu@sree:~$ sudo visudo
sree_ubuntu@sree:~$ sudo systemctl restart jenkins
sree_ubuntu@sree:~$ mkdir -p /var/lib/jenkins/workspace/html_files
mkdir: cannot create directory '/var/lib/jenkins/workspace/html_files': Permission denied
sree_ubuntu@sree:~$ sudo mkdir -p /var/lib/jenkins/workspace/html_files
0 chmod -R 777 /var/lib/jenkins/workspace/html_files
[sudo] password for sree_ubuntu:
Sorry, try again.
[sudo] password for sree_ubuntu:
sree_ubuntu@sree:~$ sudo nano /var/lib/jenkins/workspace/html_files/index.html
sree_ubuntu@sree:~$
```

In index.html

<!DOCTYPE html>

<html lang="en">

<head>

<meta charset="UTF-8">

<meta name="viewport" content="width=device-width, initial-scale=1.0">

<title>Welcome to My Website</title>

<style>

body {

font-family: Arial, sans-serif;

background-color: #f4f4f4;

```
        margin: 0;
        padding: 0;
        text-align: center;
    }
    .container {
        width: 50%;
        margin: 100px auto;
        background: white;
        padding: 20px;
        border-radius: 10px;
        box-shadow: 0px 0px 15px rgba(0, 0, 0, 0.2);
    }
    h1 {
        color: #007bff;
    }
    p {
        font-size: 18px;
        color: #555;
    }
</style>
</head>
<body>
    <div class="container">
        <h1>Welcome to My Nginx Website!</h1>
        <p>This page is hosted using Nginx installed via Jenkins.</p>
    </div>
</body>
</html>
```

Step 3: Open the execute shell and enter the following command

Update and install Nginx

```
sudo apt update
```

```
sudo apt install -y nginx
```

Start and enable Nginx service

```
sudo systemctl start nginx
```

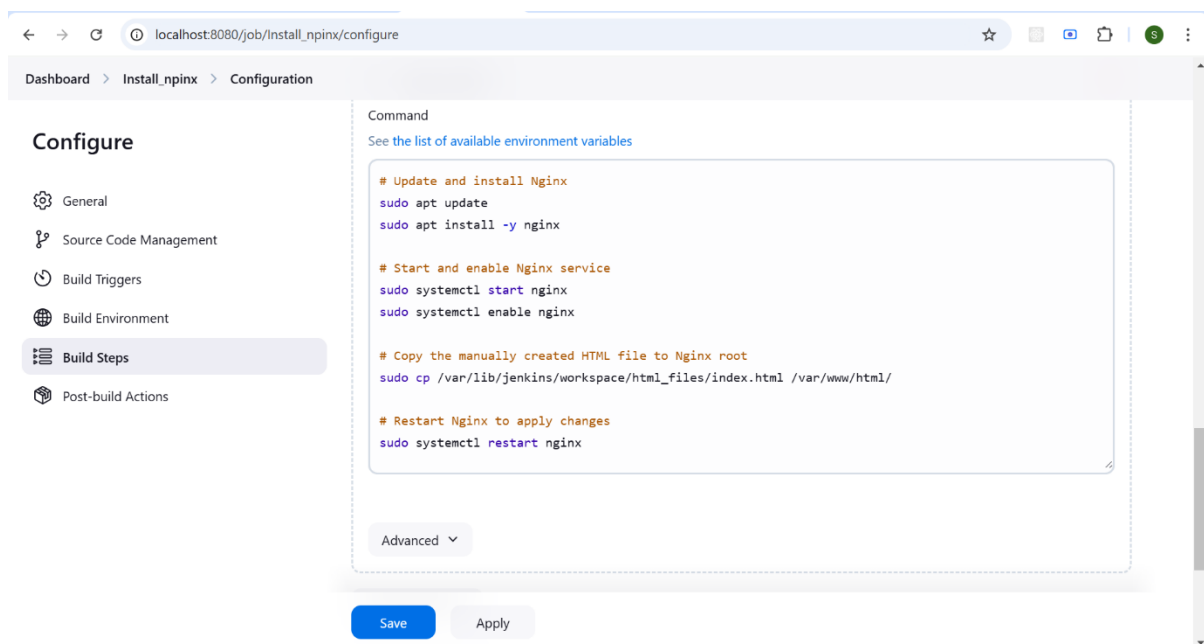
```
sudo systemctl enable nginx
```

Copy the manually created HTML file to Nginx root

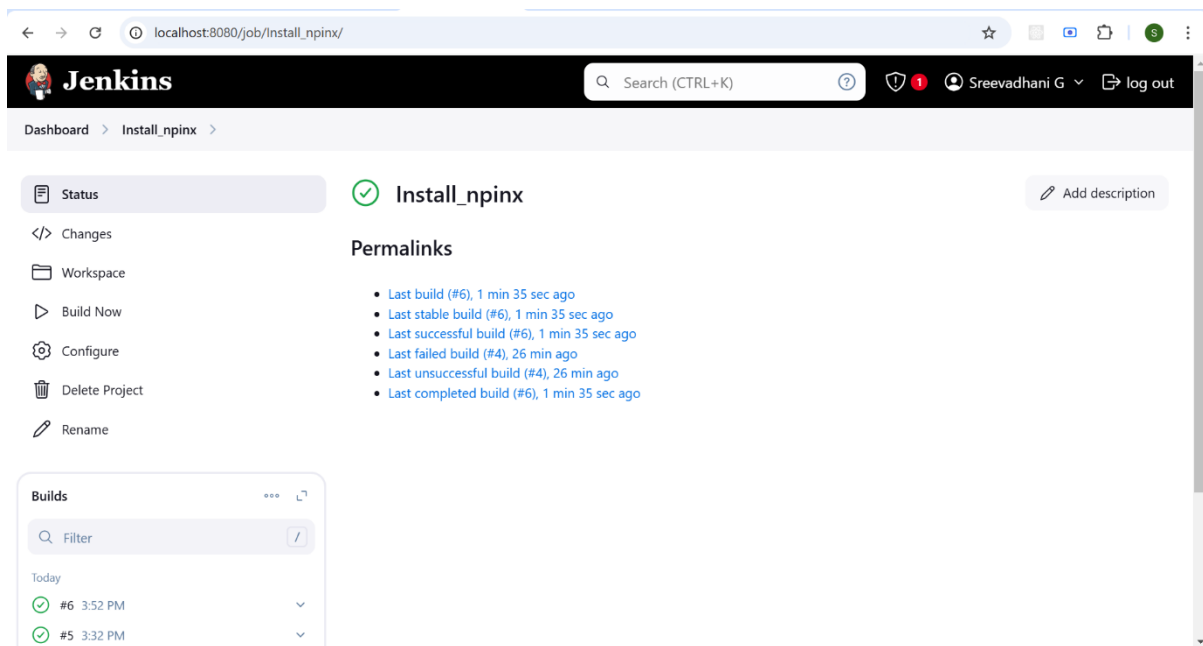
```
sudo cp /var/lib/jenkins/workspace/html_files/index.html /var/www/html/
```

Restart Nginx to apply changes

```
sudo systemctl restart nginx
```



Step 4: Run the Jenkins Job by clicking on Build Now



The screenshot shows the Jenkins web interface for a job named 'Install_npinx'. The browser address bar indicates the URL is `localhost:8080/job/Install_npinx/`. The Jenkins logo and search bar are at the top. The left sidebar contains links for Status, Changes, Workspace, Build Now, Configure, Delete Project, and Rename. The main area shows the job status as 'Install_npinx' with a green checkmark. Below this, there are 'Permalinks' for various build types. On the left, a 'Builds' section shows a list of builds, with the most recent being '#6' at 3:52 PM.

Dashboard > Install_npinx >

Status ✓ Install_npinx Add description

Changes

Workspace

Build Now

Configure

Delete Project

Rename

Builds

Filter

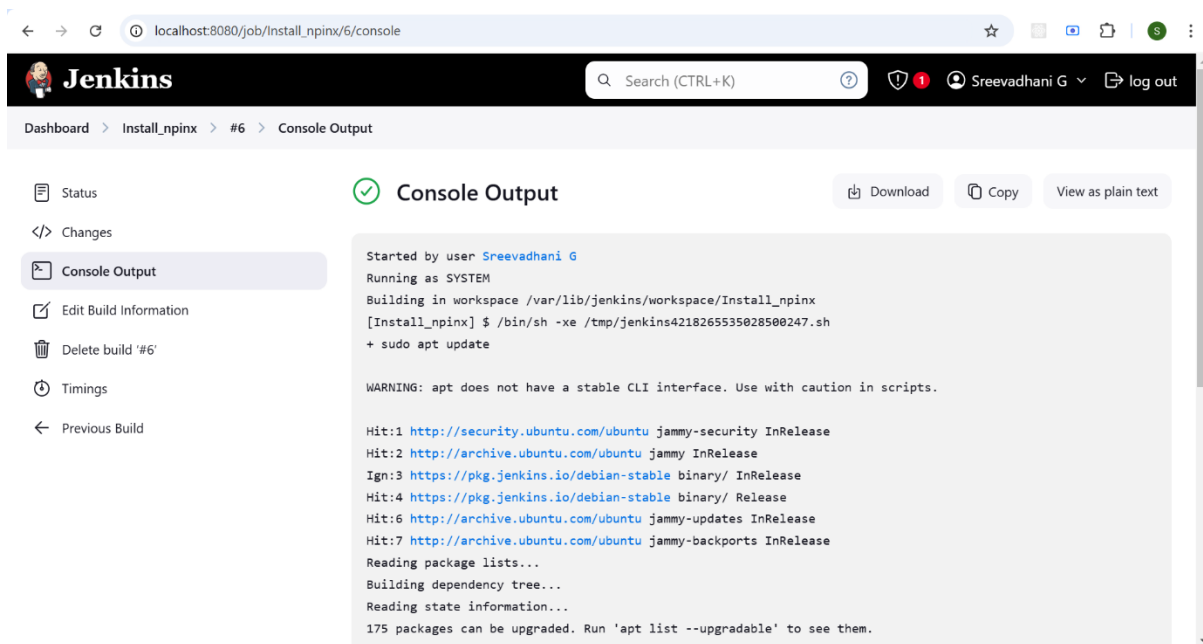
Today

- ✓ #6 3:52 PM
- ✓ #5 3:32 PM

Permalinks

- Last build (#6), 1 min 35 sec ago
- Last stable build (#6), 1 min 35 sec ago
- Last successful build (#6), 1 min 35 sec ago
- Last failed build (#4), 26 min ago
- Last unsuccessful build (#4), 26 min ago
- Last completed build (#6), 1 min 35 sec ago

Step 5: Check the Console Output to verify



The screenshot shows the Jenkins console output for build #6. The browser address bar indicates the URL is `localhost:8080/job/Install_npinx/6/console`. The Jenkins logo and search bar are at the top. The left sidebar contains links for Status, Changes, Console Output, Edit Build Information, Delete build '#6', Timings, and Previous Build. The main area shows the console output for build #6, which is 'Console Output'. The output text shows the build was started by user 'Sreevadhani G' and is running as 'SYSTEM'. It shows the build directory and the command executed: `/bin/sh -xe /tmp/jenkins4218265535028500247.sh`. The output includes a warning about the apt CLI interface and a list of package updates.

Dashboard > Install_npinx > #6 > Console Output

Status ✓ Console Output Download Copy View as plain text

Changes

Console Output

Edit Build Information

Delete build '#6'

Timings

Previous Build

Started by user Sreevadhani G

Running as SYSTEM

Building in workspace /var/lib/jenkins/workspace/Install_npinx

[Install_npinx] \$ /bin/sh -xe /tmp/jenkins4218265535028500247.sh

+ sudo apt update

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

Hit:1 <http://security.ubuntu.com/ubuntu> jammy-security InRelease

Hit:2 <http://archive.ubuntu.com/ubuntu> jammy InRelease

Ign:3 <https://pkg.jenkins.io/debian-stable> binary/ InRelease

Hit:4 <https://pkg.jenkins.io/debian-stable> binary/ Release

Hit:6 <http://archive.ubuntu.com/ubuntu> jammy-updates InRelease

Hit:7 <http://archive.ubuntu.com/ubuntu> jammy-backports InRelease

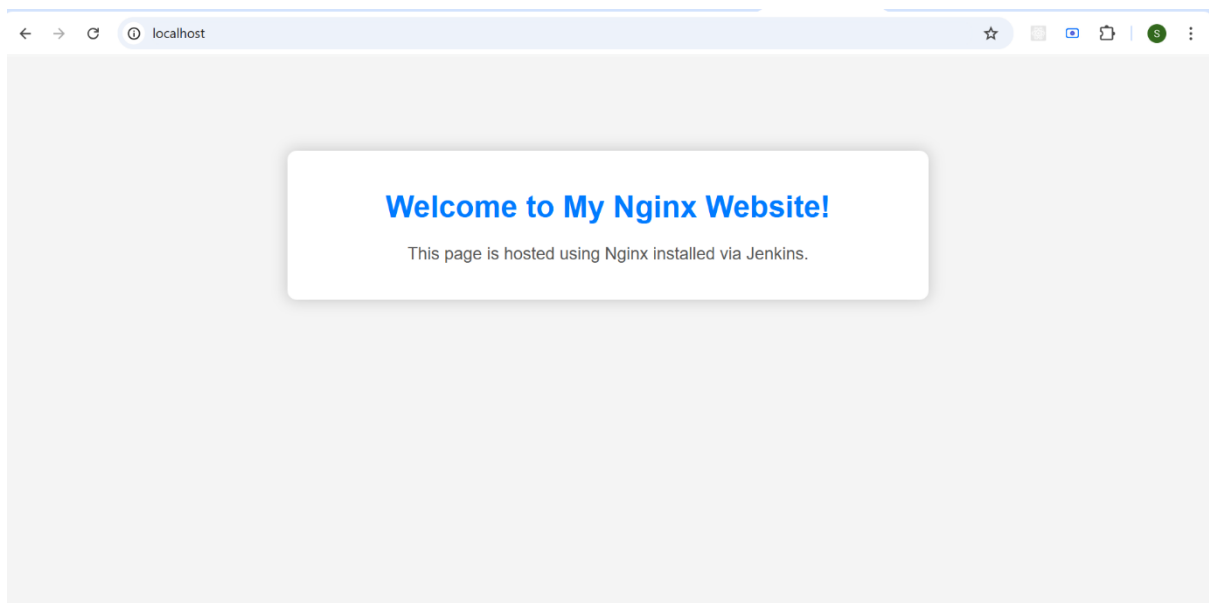
Reading package lists...

Building dependency tree...

Reading state information...

175 packages can be upgraded. Run 'apt list --upgradable' to see them.

Step 5: Go to <http://localhost> and verify the output



Step 6: Check whether the changes to the index.html reflects to the output

In index.html

```
sree_ubuntu@sree: ~
GNU nano 6.2 /var/lib/jenkins/workspace/html_files/index.html *
<!DOCTYPE html>
<html lang="en">
<head>
  <meta charset="UTF-8">
  <meta name="viewport" content="width=device-width, initial-scale=1.0">
  <title>Welcome to My Website</title>
  <style>
    body {
      font-family: Arial, sans-serif;
      background-color: #f4f4f4;
      margin: 0;
      padding: 0;
      text-align: center;
    }
    .container {
      width: 50%;
      margin: 100px auto;
      background: white;
      padding: 20px;
      border-radius: 10px;
      box-shadow: 0px 0px 15px rgba(0, 0, 0, 0.2);
    }
    h1 {
      color: #007bff;
    }
    p {
      font-size: 18px;
      color: #555;
    }
  </style>
</head>
<body>
  <div class="container">
    <h1>Welcome to My Nginx Website!</h1>
    <p>Hello, this page is in http://localhost</p>
  </div>
</body>
</html>

⌘ Help      ⌘ Write Out  ⌘ Where Is   ⌘ Cut        ⌘ Execute   ⌘ Location  ⌘ Undo      ⌘ Set Mark   ⌘ To Bracket ⌘ Previous
⌘ Exit      ⌘ Read File  ⌘ Replace    ⌘ Paste      ⌘ Justify   ⌘ Go To Line ⌘ Redo      ⌘ Copy       ⌘ Where Was ⌘ Next
```

←


→

↻


localhost:8080/job/Install_nginx/7/console

☆

S

 **Jenkins**

Search (CTRL+K)

 1

Sreevadhani G

log out

Dashboard > Install_nginx > #7 > Console Output

Status

Changes

Console Output

Edit Build Information

Delete build '#7'

Timings

Previous Build

✓ Console Output

Download

Copy

View as plain text

Started by user Sreevadhani G

Running as SYSTEM

Building in workspace /var/lib/jenkins/workspace/Install_nginx

[Install_nginx] \$ /bin/sh -xe /tmp/jenkins17252463604263409016.sh

+ sudo apt update

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

Hit:1 <http://archive.ubuntu.com/ubuntu> jammy InRelease

Hit:2 <http://security.ubuntu.com/ubuntu> jammy-security InRelease

Hit:3 <http://archive.ubuntu.com/ubuntu> jammy-updates InRelease

Ign:4 <https://pkg.jenkins.io/debian-stable> binary/ InRelease

Hit:5 <http://archive.ubuntu.com/ubuntu> jammy-backports InRelease

Hit:6 <https://pkg.jenkins.io/debian-stable> binary/ Release

Reading package lists...

Building dependency tree...

←

→

↻

localhost

☆

S

Welcome to My Nginx Website!

Hello, this page is in <http://localhost>

