**TASK 1 :**

**Aim:**

To install and run the Nginx web server on an Ubuntu system using Jenkins.

**Steps to Run the Task:**

**Step 1: Install Jenkins (If Not Installed)**

sudo apt update

sudo apt install -y openjdk-11-jdk

wget -q -O - https://pkg.jenkins.io/debian/jenkins.io.key | sudo apt-key add -

sudo sh -c 'echo deb http://pkg.jenkins.io/debian-stable binary/ > /etc/apt/sources.list.d/jenkins.list'

sudo apt update

sudo apt install -y jenkins

sudo systemctl start jenkins

sudo systemctl enable jenkins

**Step 2: Access Jenkins**

Open Jenkins in a web browser: http://localhost:8080

Login with your credentials.

**Step 3: Create a New Jenkins Job**

Click on New Item → Enter a job name → Select Freestyle project → Click OK.

**Step 4: Add Execute Shell Build Step**

Scroll to the Build section.

Click Add build step → Select Execute Shell.

Enter the following commands:

**Commands to Install and Run Nginx:**

#!/bin/bash

echo "Updating package list..."

sudo apt update

echo "Installing Nginx..."

sudo apt install -y nginx

echo "Starting Nginx service..."

sudo systemctl start nginx

sudo systemctl enable nginx

echo "Allowing firewall access..."

sudo ufw allow 'Nginx Full'

echo "Checking Nginx status..."

systemctl status nginx

**Step 5: Save and Run the Job**

Click Save and then Build Now.

Monitor the Console Output to verify installation.

**Step 6: Verify Nginx Installation**

Open a web browser and go to: http://localhost:8080

You should see the Nginx default welcome page.





