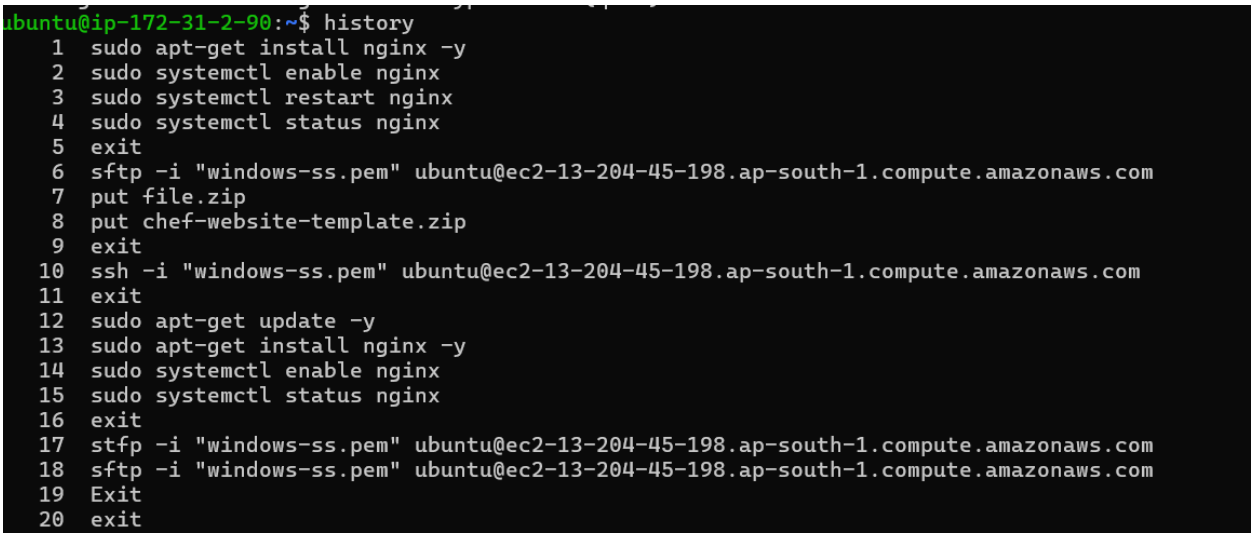
Homework Cycle 08 - Server Deployment Tasks

Task 1: Deploy Nginx Webserver on Ubuntu (Port 80)



```
ubuntu@ip-172-31-2-90:~$ history
    1  sudo apt-get install nginx -y
    2  sudo systemctl enable nginx
    3  sudo systemctl restart nginx
    4  sudo systemctl status nginx
    5  exit
    6  sftp -i "windows-ss.pem" ubuntu@ec2-13-204-45-198.ap-south-1.compute.amazonaws.com
    7  put file.zip
    8  put chef-website-template.zip
    9  exit
   10  ssh -i "windows-ss.pem" ubuntu@ec2-13-204-45-198.ap-south-1.compute.amazonaws.com
   11  exit
   12  sudo apt-get update -y
   13  sudo apt-get install nginx -y
   14  sudo systemctl enable nginx
   15  sudo systemctl status nginx
   16  exit
   17  stfp -i "windows-ss.pem" ubuntu@ec2-13-204-45-198.ap-south-1.compute.amazonaws.com
   18  sftp -i "windows-ss.pem" ubuntu@ec2-13-204-45-198.ap-south-1.compute.amazonaws.com
   19  Exit
   20  exit
```

Steps:

1. Update package lists:

   bash

   ```
   sudo apt update
   ```

2. Install Nginx:

   bash

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

3. Start and enable Nginx:

   bash

```
sudo systemctl start nginx
sudo systemctl enable nginx
```

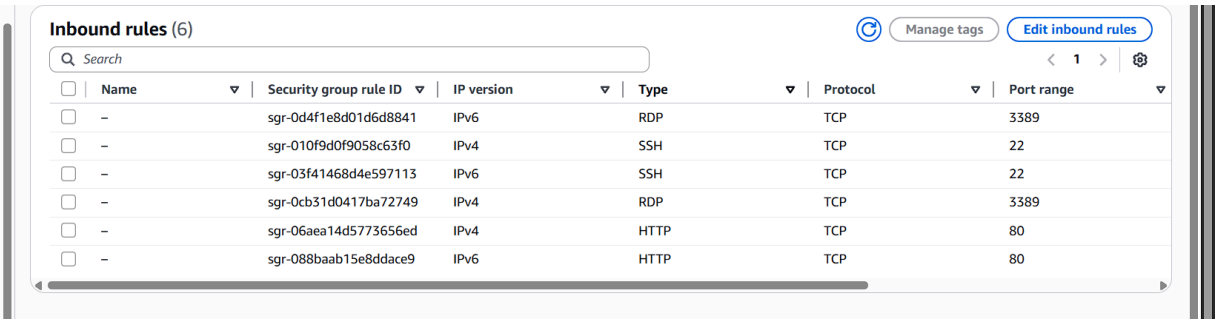
4. Verify installation:

   bash

```
sudo systemctl status nginx
curl localhost
```

Verification:

- Open web browser and visit `http://<your-server-ip>`
- Should see "Welcome to nginx!" page



Task 2: Deploy Jenkins on Ubuntu (Port 8080)

Steps:

1. Install Java (prerequisite):

   bash

   ```
   sudo apt install openjdk-11-jdk -y
   ```

2. Add Jenkins repository:

   bash

   ```
   wget -q -O - https://pkg.jenkins.io/debian/jenkins.io.key | sudo apt-key ad
   d -
   sudo sh -c 'echo deb http://pkg.jenkins.io/debian-stable binary/ > /etc/ap
   t/sources.list.d/jenkins.list'
   ```

3. Install Jenkins:

   bash

   ```
   sudo apt update
   sudo apt install jenkins -y
   ```

4. Start and enable Jenkins:

   bash

```
sudo systemctl start jenkins
sudo systemctl enable jenkins
```

5. Check status:

   bash

   ```
   sudo systemctl status jenkins
   ```

Verification:

- Access Jenkins at `http://<your-server-ip>:8080`
- Retrieve initial admin password:

  bash

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

Task 3: Deploy VSFTPD File Server with FileZilla

Steps:

1. Install VSFTPD:

   bash

   ```
   sudo apt install vsftpd -y
   ```

2. Configure VSFTPD:

   bash

   ```
   sudo nano /etc/vsftpd.conf
   ```

   - Uncomment or add these lines:

     text

```
write_enable=YES
local_umask=022
chroot_local_user=YES
allow_writeable_chroot=YES
```

3. Restart VSFTPD:

   bash

   ```
   sudo systemctl restart vsftpd
   sudo systemctl enable vsftpd
   ```

4. Create FTP user:

   bash

   ```
   sudo adduser ftpuser
   sudo usermod -d /var/www/html ftpuser
   ```

FileZilla Setup:

1. Download and install FileZilla Client on your local machine
2. Connect using:
   - Host: your server IP
   - Username: ftpuser
   - Password: the password you set
   - Port: 21

Task 4: SFTP Command Line Usage

Basic SFTP Commands:

1. Connect to server:

   bash

```
sftp -i /path/to/key.pem username@server_ip
```

2. Upload file:

   bash

   ```
   put local_file.txt /remote/path/
   ```

3. Download file:

   bash

   ```
   get /remote/file.txt ~/local/path/
   ```

4. Other useful commands:

   bash

   ```
   ls          # List remote files
   lls         # List local files
   cd          # Change remote directory
   lcd         # Change local directory
   mkdir       # Create remote directory
   exit        # Quit SFTP session
   ```