### Step 1: Ensure/Double Check Permissions on Sensitive Files

1. Permissions on /etc/shadow should allow only root read and write access.

- Command to inspect permissions:

- ls -l /etc/shadow

1. Permissions on /etc/gshadow should allow only root read and write access.

- Command to inspect permissions:

- ls -l /etc/gshadow

1. Permissions on /etc/group should allow root read and write access and allow everyone else read access only.

- Command to inspect permissions:

- ls -l /etc/group

- Command to set permissions (if needed):

- Permissions allowed for group and others to read and write. Command to change permissions: sudo chmod u=rw,g=r,o=r /etc/group. Output after using chmod was: -rw-r--r-- 1 root root 1303 May 14 2021 /etc/group

1. Permissions on /etc/passwd should allow root read and write access and allow everyone else read access only.

- Command to inspect permissions:

- ls -l /etc/passwd

- Command to set permissions (if needed):

- Permissions allowed for group to read and write and others to read. Command to change permissions: ls -l /etc/passwd. Output after using “ls -l” again: ls -l /etc/passwd

### Step 2: Create User Accounts

1. Add user accounts for sam, joe, amy, sara, and admin.

- Command to add each user account (include all five users):

- sudo adduser sam

- sudo adduser joe

- sudo adduser amy

- sudo adduser sara

- sudo adduser admin

1. Ensure that only the admin has general sudo access.

- Command to add admin to the sudo group:

**-** sudo usermod -aG sudo admin

### Step 3: Create User Group and Collaborative Folder

1. Add an engineers group to the system.

- Command to add group: sudo groupadd engineers

1. Add users sam, joe, amy, and sara to the managed group.

- Command to add users to engineers group (include all four users):

- sudo usermod -aG engineers sam

- sudo usermod -aG engineers joe

- sudo usermod -aG engineers amy

- sudo usermod -aG engineers sara

1. Create a shared folder for this group at /home/engineers.

- Command to create the shared folder: sudo mkdir engineers

1. Change ownership on the new engineers' shared folder to the engineers group.

- Command to change ownership of engineer's shared folder to engineer group: sudo chown :engineers engineers

### Step 4: Lynis Auditing

1. Command to install Lynis:

- sudo apt-get install lynis

1. Command to see documentation and instructions:

- man lynis

1. Command to run an audit:

- sudo lynis audit system