



Assignment - 2

## Points Covered in this Assignment-2

### 1. User Administration

- Authentication, Authorization, and Auditing

### 2. Commands to Learn

- useradd, passwd, userdel, usermod
- groupadd, groupdel, groupmod
- su and su -with examples

### 3. User and Group Information

- User and group information files
- Password information files

### 4. Password Policies

- chage command and its options

### 5. User Monitoring and Auditing

- Commands: w, last, lastb

### 6. Sudo Power

- wheel group

### 7. Default Configuration Files

- /etc/default/useradd
  - /etc/login.defs
  - /etc/security/limits.conf
- 

### 1. Create some users:

- Named "**alex**" with its home directory at **/home/user1** and give password "**pass1**".
- Named "**brew**" with its home directory at **/mnt/user2** and give password "**pass2**".
- Named "**nora**" without its home directory
- Named "**panny**" with custom UID **2112**, and assign password "**pass-4**"
- Named '**texas**' without using the **useradd** or **adduser** commands.

*\*(Hint: Make changes in the 7 user configuration files)*

### 2. Log in as user alex using the **su** and **su -** commands, and explain their differences.

### 3. Set a password policy for all above users with the following requirements:

- The maximum password age should be 30 days, and the minimum password age should be 10 days.
- Set the password expiry date for all users to December 31, 2025.

#### 4. Modify the user "alex":

- Add a comment: "I am alex"
- Change the UID to 2581
- Change the shell to "nologin"

#### 5. Create group with following configuration:

- Named "**north**" with secondary group member "alex" & "texas".
- Named "**south**" with GID "2222".

#### 6. Grant user **Alex** administrative privileges through the wheel group so that Alex can add Panny to the admin group without requiring root access.

#### 7. Change the group name from "**south**" to "**dakshin**".

#### 8. Create a system user named "**ping**" and check its UID.

#### 9. Create a group named **goa** with GID 11000. Set this group as the supplementary group for "**brew**"

#### 10. Create a group named "**prod**". Then, create two users, user2 and user1, and set both the user's primary group to **prod**.

#### 11. Change the password policy for the USER3 and USER4 accounts to expire on 2026-01-15.

#### 12. Configure administrative rights for all members of the **Goa** group to execute any command as any user.

#### 13. How would you check all failed login attempts on the system from the last 10 days? Write the command and display the output.

#### 14. How would you determine how many users are currently logged into the system? Write the command to achieve this.

#### 15. Add the user "**sara**" to the "wheel" group and create a collaborative directory /collaborative/infodir.

#### 16. Configure login/logout messages:

- When you log in with a new user, display a message: "Hello, you are logged in as USER" (where USER is replaced with the logged-in username).
- When you log out, display: "You are logged out now".

#### 17. Configure system parameters for newly created users:

- Warning period for password expiry: 5 days

- Minimum user UID: 2000
- Maximum user UID: 70000

**18. Create a directory /data** and configure the system so that all newly created users get /data as their home directory by default.

19. Name a file where we can set a file size limit upto 200 MB for a single file.

**20. Check the last three users** who logged into your system.

21. As a system administrator, how would you configure the system to ensure that:

- Automatically create an instructions.txt file in the home directory of every new user upon account creation.
- Ensure that the mail directory for every newly created user is set to /home/spool/mail/ by default?"

**22. Delete some users**

- Named 'alex' and 'brew' with its all data contents including mail data.