Project: User and Group Management System (Total marks 100%)

Objective:

The main objective of this project is to get familiarized with user and group management in Linux

Project Description:

Imagine you're an admin for a startup company, TechnologyXServices. You've been tasked to set up user accounts for new employees and organize them into relevant groups based on their departments.

Tasks:

1. User Creation:

- Create users for 5 new employees: Alice, Bob, Charlie, Dave, and Eve.
- Set up strong passwords for each user and ensure they change it at the first login.

2. **Group Management**:

- Create three new groups: **Developers, Designers, and HR**.
- Assign users to the groups based on the following:
 - Alice and Charlie are Developers.
 - **Bob** is a **Designer**.
 - Dave and Eve are in HR.

3. **Directory Setup**:

- Create a directory for each group in /home/department/ (e.g., /home/department/Developers).
- Ensure only users of a group can access their respective directory. For instance, only Alice and Charlie should access the Developers directory.

4. File Management:

- In each department directory, create a **README.txt** file that contains a brief description of the department.
- Ensure that only group members can read and write to the file, but others should not have any access.

5. Advanced Task (for bonus points):

• Create a shared directory at /home/shared.

• All users should be able to read files in this directory, but only members of the **HR** group should be able to create files or directories here. However, they shouldn't be able to delete files owned by others.

6. **Documentation**:

• Write a brief report documenting the commands you used to accomplish each task. Include any challenges faced and how you overcame them.

Submission:

- Submit the command history showing all the commands used to complete the tasks.
- The documentation report.