

1-

```
Activities  Terminal ▾
nada@nada-Dell-G15-5515:~$ sudo groupadd iot_team
[sudo] password for nada:
nada@nada-Dell-G15-5515:~$ sudo usermod -aG iot_team nada
nada@nada-Dell-G15-5515:~$ groups nada
nada : nada adm dialout cdrom sudo dip plugdev lpadmin lxd sambashare iot_team
```

2-

```
nada@nada-Dell-G15-5515:~$ sudo adduser developer
Adding user 'developer' ...
Adding new group 'developer' (1002) ...
Adding new user 'developer' (1001) with group 'developer' ...
Creating home directory '/home/developer' ...
Copying files from '/etc/skel' ...
New password:
Retype new password:
passwd: password updated successfully
Changing the user information for developer
Enter the new value, or press ENTER for the default
  Full Name []: iot_developer
   Room Number []: developer
   Work Phone []:
   Home Phone []:
   Other []:
Is the information correct? [Y/n] y
nada@nada-Dell-G15-5515:~$ sudo usermod -aG iot_team developer
nada@nada-Dell-G15-5515:~$ groups developer
developer : developer iot_team
```

3-

```
nada@nada-Dell-G15-5515:~$ sudo chown -R developer:iot_team /home/nada/iot_logger
nada@nada-Dell-G15-5515:~$ ls -ld /home/nada/iot_logger
drwxrwxr-x 5 developer iot_team 4096 20:51 30 أليس /home/nada/iot_logger

nada@nada-Dell-G15-5515:~$ history -d $(history 1)
nada@nada-Dell-G15-5515:~$ ls -l /home/nada/iot_logger
total 12
drwxrwxr-x 2 developer iot_team 4096 21:51 31 أليس data
drwxrwxr-x 2 developer iot_team 4096 22:02 31 أليس logs
drwxrwxr-x 2 developer iot_team 4096 21:49 31 أليس scripts
```

4-

```
nada@nada-Dell-G15-5515:~$ sudo chmod -R 770 /home/nada/iot_logger/logs
nada@nada-Dell-G15-5515:~$ ls -ld /home/nada/iot_logger/logs
drwxrwx--- 2 developer iot_team 4096 22:02 31 أليس /home/nada/iot_logger/logs
```

```

drwxrwx--- 2 developer iot_team 4096 22.02 31  /home/nada/iot_logger/logs
nada@nada-Dell-G15-5515:~$ su - developer
Password:
developer@nada-Dell-G15-5515:~$ cd /home/<your-username>/iot_logger/logs
-bash: your-username: No such file or directory
developer@nada-Dell-G15-5515:~$ touch test.log # should succeed since group has write
developer@nada-Dell-G15-5515:~$ cd /home/nada/iot_logger/logs
developer@nada-Dell-G15-5515:/home/nada/iot_logger/logs$ touch test.log
developer@nada-Dell-G15-5515:/home/nada/iot_logger/logs$ exit
logout
nada@nada-Dell-G15-5515:~$ sudo deluser developer
Removing user 'developer' ...
Warning: group 'developer' has no more members.
Done.
nada@nada-Dell-G15-5515:~$ sudo rm -r /home/developer
nada@nada-Dell-G15-5515:~$ ls -ld /home/developer
ls: cannot access '/home/developer': No such file or directory
nada@nada-Dell-G15-5515:~$ getent passwd | grep developer
nada@nada-Dell-G15-5515:~$

```