1. Create the following users, groups and group memberships
   a) A group named admin

```
root@22A91A61D1:~

[root@22A91A61D1 ~]# groupadd admin
[root@22A91A61D1 ~]# tail -n1 /etc/group
admin:x:1001:
[root@22A91A61D1 ~]#
```

   b) A user harry who belongs to admin as a secondary group

2. Create a collaborative directory /common/admin with the following characterstics:

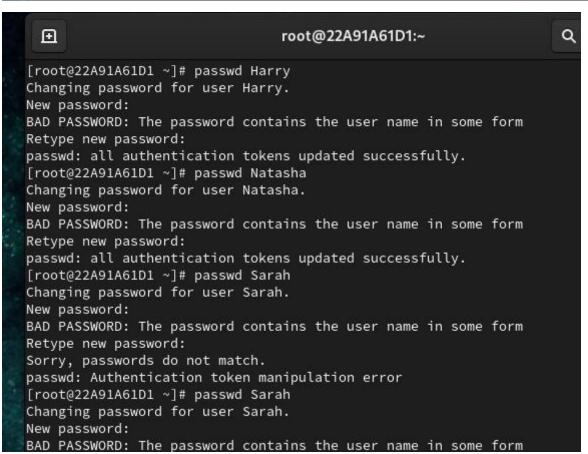   a) Group ownership of /common/admin is admin.

```
root@22A91A61D1:~

[root@22A91A61D1 ~]# mkdir -p /common/admin
[root@22A91A61D1 ~]# ls -ld /common/admin
drwxr-xr-x. 2 root root 6 Oct 18 21:22 /common/admin
[root@22A91A61D1 ~]#
```

   b) The directory should be readable,writable and accessible to members of admin, but not to any other user.

```
root@22A91A61D1:~

[root@22A91A61D1 ~]# chgrp admin /common/admin
[root@22A91A61D1 ~]# ls -ld /common/admin
drwxr-xr-x. 2 root admin 6 Oct 18 21:22 /common/admin
[root@22A91A61D1 ~]# chmod 770 /common/admin
[root@22A91A61D1 ~]# ls -ld /common/admin
drwxrwx---. 2 root admin 6 Oct 18 21:22 /common/admin
[root@22A91A61D1 ~]#
```

```
root@22A91A61D1:~

[root@22A91A61D1 ~]# useradd -G admin Harry
[root@22A91A61D1 ~]# id Harry
uid=1328(Harry) gid=1328(Harry) groups=1328(Harry),1001(admin)
[root@22A91A61D1 ~]#
```

F


```
[root@22A91A61D1 ~]# useradd -G admin Natasha
[root@22A91A61D1 ~]# id Natasha
uid=1329(Natasha) gid=1329(Natasha) groups=1329(Natasha),1001(admin)
[root@22A91A61D1 ~]#
```
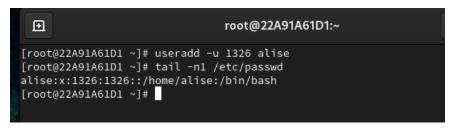


```
[root@22A91A61D1 ~]# passwd Harry
Changing password for user Harry.
New password:
BAD PASSWORD: The password contains the user name in some form
Retype new password:
passwd: all authentication tokens updated successfully.
[root@22A91A61D1 ~]# passwd Natasha
Changing password for user Natasha.
New password:
BAD PASSWORD: The password contains the user name in some form
Retype new password:
passwd: all authentication tokens updated successfully.
[root@22A91A61D1 ~]# passwd Sarah
Changing password for user Sarah.
New password:
BAD PASSWORD: The password contains the user name in some form
Retype new password:
Sorry, passwords do not match.
passwd: Authentication token manipulation error
[root@22A91A61D1 ~]# passwd Sarah
Changing password for user Sarah.
New password:
BAD PASSWORD: The password contains the user name in some form
```

3.Find the string a) Find a string "home" in /etc/passwd and searching string as been stored in /root/search.txt


```
[root@22A91A61D1 ~]# grep "home" /etc/passwd >/root/search.txt
[root@22A91A61D1 ~]# cat search.txt
chandu:x:1000:1000:chandu:/home/chandu:/bin/bash
sarah:x:1001:1002::/home/sarah:/bin/bash
[root@22A91A61D1 ~]# cd
[root@22A91A61D1 ~]# cat search.txt
chandu:x:1000:1000:chandu:/home/chandu:/bin/bash
sarah:x:1001:1002::/home/sarah:/bin/bash
[root@22A91A61D1 ~]#
```

4. Create a user account

a) Create a new user with UID 1326 and user name as alies.

```
[root@22A91A61D1 ~]# useradd -u 1326 alise
[root@22A91A61D1 ~]# tail -n1 /etc/passwd
alise:x:1326:1326::/home/alise:/bin/bash
[root@22A91A61D1 ~]#
```

5. Set the Permission

```
[natasa@22A921A61D1 ~]$ umask 266
[natasa@22A921A61D1 ~]$ ls -ld file44.txt
-r--------. 1 natasa natasa 0 Oct 18 21:53 file44.txt
[natasa@22A921A61D1 ~]$ usmask 277
bash: usmask: command not found...
[natasa@22A921A61D1 ~]$ ls -ld thub
dr-x------. 2 natasa natasa 6 Oct 18 21:11 thub
[natasa@22A921A61D1 ~]$
```