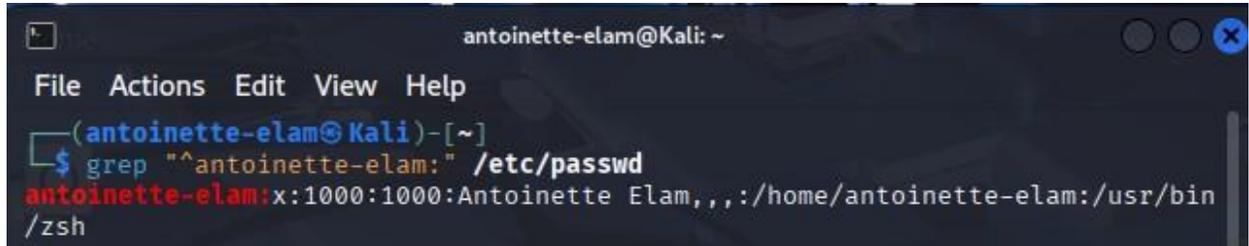


Task 1.

1. Open a terminal window in VM and execute the correct command to display user account information (including the login shell and home directory) for the current user using `grep`.

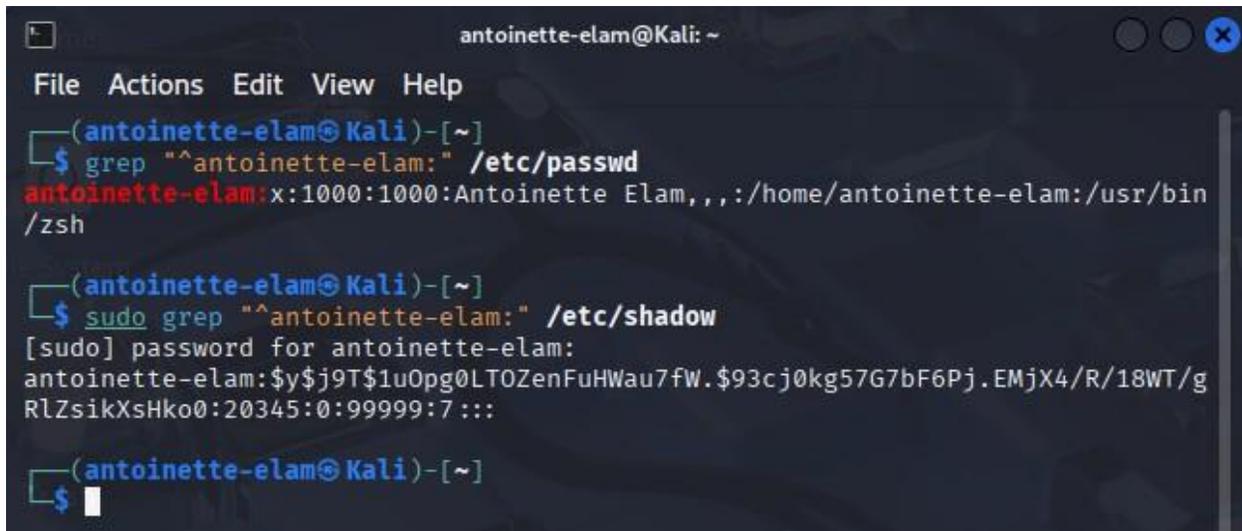


```
antoinette-elam@Kali: ~  
File Actions Edit View Help  
(antoinette-elam@Kali)-[~]  
$ grep '^antoinette-elam:' /etc/passwd  
antoinette-elam:x:1000:1000:Antoinette Elam,,,:/home/antoinette-elam:/usr/bin  
/zsh
```

Steps:

- Opened and signed into kali
- Opened terminal window
- Executed command `grep '^antoinette-elam:' /etc/passwd`

2. Execute the correct command to display user password information (including the encrypted password and password aging) for the current user using `grep`.



```
antoinette-elam@Kali: ~  
File Actions Edit View Help  
(antoinette-elam@Kali)-[~]  
$ grep '^antoinette-elam:' /etc/passwd  
antoinette-elam:x:1000:1000:Antoinette Elam,,,:/home/antoinette-elam:/usr/bin  
/zsh  
  
(antoinette-elam@Kali)-[~]  
$ sudo grep '^antoinette-elam:' /etc/shadow  
[sudo] password for antoinette-elam:  
antoinette-elam:$y$j9T$1u0pg0LT0ZenFuHWau7fW.$93cj0kg57G7bF6Pj.EMjX4/R/18WT/g  
RLZsikXsHko0:20345:0:99999:7:::  
  
(antoinette-elam@Kali)-[~]  
$
```

- Executed command `sudo grep '^antoinette-elam:' /etc/shadow`
- Entered password

3. Create a new user named `xxxxx` and explicitly use options to create the home directory `/home/xxxxx` for this user

```
antoinette-elam@Kali: ~  
File Actions Edit View Help  
└─(antoinette-elam@Kali)-[~]  
└─$ grep "^antoinette-elam:" /etc/passwd  
antoinette-elam:x:1000:1000:Antoinette Elam,,,:/home/antoinette-elam:/usr/bin  
/zsh  
  
└─(antoinette-elam@Kali)-[~]  
└─$ sudo grep "^antoinette-elam:" /etc/shadow  
[sudo] password for antoinette-elam:  
antoinette-elam:$y$j9T$1u0pg0LTOZenFuHWau7fW.$93cj0kg57G7bF6Pj.EMjX4/R/18WT/g  
RLZsikXsHko0:20345:0:99999:7::  
  
└─(antoinette-elam@Kali)-[~]  
└─$ sudo useradd -m -d /home/aelam010 aelam010  
[sudo] password for antoinette-elam:  
  
└─(antoinette-elam@Kali)-[~]  
└─$ █
```

- Enter command **sudo useradd -m -d /home/aelam010 aelam010**
- Enter password

4. Set a password for the new user.

```
antoinette-elam@Kali: ~  
File Actions Edit View Help  
(antoinette-elam@Kali)-[~]  
$ grep "^antoinette-elam:" /etc/passwd  
antoinette-elam:x:1000:1000:Antoinette Elam,,,:/home/antoinette-elam:/usr/bin  
/zsh  
(antoinette-elam@Kali)-[~]  
$ sudo grep "^antoinette-elam:" /etc/shadow  
[sudo] password for antoinette-elam:  
antoinette-elam:$y$j9T$1u0pg0LTOZenFuHWau7fW.$93cj0kg57G7bF6Pj.EMjX4/R/18WT/g  
RlZsikXsHko0:20345:0:99999:7::  
(antoinette-elam@Kali)-[~]  
$ sudo useradd -m -d /home/aelam010 aelam010  
[sudo] password for antoinette-elam:  
(antoinette-elam@Kali)-[~]  
$ sudo passwd aelam010  
New password:  
Retype new password:  
passwd: password updated successfully  
(antoinette-elam@Kali)-[~]  
$
```

Insert command **sudo passwd aelam010**
Enter new password **x2**

5. Set bash shell as the default login shell for the new user xxxxx, then verify the change.

```
antoinette-elam@Kali: ~  
File Actions Edit View Help  
/zsh  
  
(antoinette-elam@Kali)-[~]  
$ sudo grep "^antoinette-elam:" /etc/shadow  
[sudo] password for antoinette-elam:  
antoinette-elam:$y$j9T$1u0pg0LTOZenFuHWau7fW.$93cj0kg57G7bF6Pj.EMjX4/R/18WT/g  
RlZsikXsHko0:20345:0:99999:7:::  
  
(antoinette-elam@Kali)-[~]  
$ sudo useradd -m -d /home/aelam010 aelam010  
[sudo] password for antoinette-elam:  
  
(antoinette-elam@Kali)-[~]  
$ sudo passwd aelam010  
New password:  
Retype new password:  
passwd: password updated successfully  
  
(antoinette-elam@Kali)-[~]  
$ sudo usermod -s /bin/bash aelam010  
[sudo] password for antoinette-elam:  
Sorry, try again.  
[sudo] password for antoinette-elam:  
Sorry, try again.  
[sudo] password for antoinette-elam:  
  
(antoinette-elam@Kali)-[~]  
$
```

execute command **sudo usermod -s /bin/bash aelam010**
Enter password

6. Execute the correct command to display user password information (including the encrypted password and password aging) for the new user xxxxx using grep.

```
antoinette-elam@Kali: ~  
File Actions Edit View Help  
antoinette-elam:$y$j9T$1u0pg0LT0ZenFuHWau7fW.$93cj0kg57G7bF6Pj.EMjX4/R/18WT/g  
RLZsikXsHko0:20345:0:99999:7 :::  
  
(antoinette-elam@Kali)-[~]  
$ sudo useradd -m -d /home/aelam010 aelam010  
[sudo] password for antoinette-elam:  
  
(antoinette-elam@Kali)-[~]  
$ sudo passwd aelam010  
New password:  
Retype new password:  
passwd: password updated successfully  
  
(antoinette-elam@Kali)-[~]  
$ sudo usermod -s /bin/bash aelam010  
[sudo] password for antoinette-elam:  
Sorry, try again.  
[sudo] password for antoinette-elam:  
Sorry, try again.  
[sudo] password for antoinette-elam:  
  
(antoinette-elam@Kali)-[~]  
$ sudo grep "^aelam010:" /etc/shadow  
aelam010:$y$j9T$Dq0xnZpFXNzo88x99T9hC.$u0YymX8AW0Da1xSmhXp5JhUEGtY57ug7U2/mkH  
dOP03:20352:0:99999:7 :::  
  
(antoinette-elam@Kali)-[~]  
$
```

execute command **sudo grep “^aelam010:” /etc/shadow**

7. Add the new user xxxxx to sudo group without overriding the existing group membership.

```
antoinette-elam@Kali: ~
File Actions Edit View Help
(antoinette-elam@Kali)-[~]
$ sudo useradd -m -d /home/aelam010 aelam010
[sudo] password for antoinette-elam:

(antoinette-elam@Kali)-[~]
$ sudo passwd aelam010
New password:
Retype new password:
passwd: password updated successfully

(antoinette-elam@Kali)-[~]
$ sudo usermod -s /bin/bash aelam010
[sudo] password for antoinette-elam:
Sorry, try again.
[sudo] password for antoinette-elam:
Sorry, try again.
[sudo] password for antoinette-elam:

(antoinette-elam@Kali)-[~]
$ sudo grep "^aelam010:" /etc/shadow
aelam010:$y$j9T$Dq0xnZpFXNzo88x99T9hC.$u0YymX8AW0Da1xSmhXp5JhUEGtY57ug7U2/mkH
dOP03:20352:0:99999:7:::

(antoinette-elam@Kali)-[~]
$ sudo usermod -aG sudo aelam010

(antoinette-elam@Kali)-[~]
$
```

Execute command `sudo usermod -aG sudo aelam010`

8. Switch to the new user's account

```
aelam010@Kali: ~  
File Actions Edit View Help  
  
(antoINETte-elam@Kali)-[~]  
$ sudo passwd aelam010  
New password:  
Retype new password:  
passwd: password updated successfully  
  
(antoINETte-elam@Kali)-[~]  
$ sudo usermod -s /bin/bash aelam010  
[sudo] password for antoINETte-elam:  
Sorry, try again.  
[sudo] password for antoINETte-elam:  
Sorry, try again.  
[sudo] password for antoINETte-elam:  
  
(antoINETte-elam@Kali)-[~]  
$ sudo grep "^aelam010:" /etc/shadow  
aelam010:$y$j9T$Dq0xnZpFXNzo88x99T9hC.$u0YymX8AW0Da1xSmhXp5JhUEGtY57ug7U2/mkH  
dOP03:20352:0:99999:7:::  
  
(antoINETte-elam@Kali)-[~]  
$ sudo usermod -aG sudo aelam010  
  
(antoINETte-elam@Kali)-[~]  
$ su - aelam010  
Password:  
(aelam010@Kali)-[~]  
$
```

Command su – aelam010

Task 2

```
antoinette-elam@Kali: ~  
File Actions Edit View Help  
d0P03:20352:0:99999:7:::  
  
(antoinette-elam@Kali)-[~]  
$ sudo usermod -aG sudo aelam010  
  
(antoinette-elam@Kali)-[~]  
$ su - aelam010  
Password:  
(aelam010@Kali)-[~]  
$ cd ~  
  
(aelam010@Kali)-[~]  
$ exit  
logout  
  
(antoinette-elam@Kali)-[~]  
$ cd ~  
  
(antoinette-elam@Kali)-[~]  
$ pwd  
/home/antoinette-elam  
  
(antoinette-elam@Kali)-[~]  
$ echo $SHELL  
/usr/bin/zsh  
  
(antoinette-elam@Kali)-[~]  
$
```

```
antoinette-elam@Kali: ~
File Actions Edit View Help
Password:
(aelam010@Kali)-[~]
$ cd ~

(aelam010@Kali)-[~]
$ exit
logout

(antoinette-elam@Kali)-[~]
$ cd ~

(antoinette-elam@Kali)-[~]
$ pwd
/home/antoinette-elam

(antoinette-elam@Kali)-[~]
$ echo $SHELL
/usr/bin/zsh

(antoinette-elam@Kali)-[~]
$ id
uid=1000(antoinette-elam) gid=1000(antoinette-elam) groups=1000(antoinette-elam),4(adm),20(dialout),24(cdrom),25(floppy),27(sudo),29(audio),30(dip),44(video),46(plugdev),100(users),101(netdev),103(scanner),116(bluetooth),121(lpadmin),124(wireshark),133(vboxsf),134(kaboxer)

(antoinette-elam@Kali)-[~]
$
```

```
antoinette-elam@Kali: ~
File Actions Edit View Help
(aelam010@Kali)-[~]
$ exit
Logout
(antoinette-elam@Kali)-[~]
$ cd ~
(antoinette-elam@Kali)-[~]
$ pwd
/home/antoinette-elam
(antoinette-elam@Kali)-[~]
$ echo $SHELL
/usr/bin/zsh
(antoinette-elam@Kali)-[~]
$ id
uid=1000(antoinette-elam) gid=1000(antoinette-elam) groups=1000(antoinette-elam),4(adm),20(dialout),24(cdrom),25(floppy),27(sudo),29(audio),30(dip),44(video),46(plugdev),100(users),101(netdev),103(scanner),116(bluetooth),121(lpadmin),124(wireshark),133(vboxsf),134(kaboxer)
(antoinette-elam@Kali)-[~]
$ groups root
root : root
(antoinette-elam@Kali)-[~]
$
```

```
antoinette-elam@Kali: ~  
File Actions Edit View Help  
(antoinette-elam@Kali)-[~]  
$ cd ~  
(antoinette-elam@Kali)-[~]  
$ pwd  
/home/antoinette-elam  
(antoinette-elam@Kali)-[~]  
$ echo $SHELL  
/usr/bin/zsh  
(antoinette-elam@Kali)-[~]  
$ id  
uid=1000(antoinette-elam) gid=1000(antoinette-elam) groups=1000(antoinette-elam),4(adm),20(dialout),24(cdrom),25(floppy),27(sudo),29(audio),30(dip),44(video),46(plugdev),100(users),101(netdev),103(scanner),116(bluetooth),121(lpadmin),124(wireshark),133(vboxsf),134(kaboxer)  
(antoinette-elam@Kali)-[~]  
$ groups root  
root : root  
(antoinette-elam@Kali)-[~]  
$ ls -l /etc/group  
-rw-r--r-- 1 root root 1496 Sep 21 13:53 /etc/group  
(antoinette-elam@Kali)-[~]  
$
```

```
antoinette-elam@Kali: ~  
File Actions Edit View Help  
[sudo] password for antoinette-elam:  
groupadd: invalid group ID 'aelam010'  
  
(antoinette-elam@Kali)-[~]  
$  
  
(antoinette-elam@Kali)-[~]  
$ sudo groupadd -g 01269754  
Usage: groupadd [options] GROUP  
  
Options:  
-f, --force                exit successfully if the group already exists  
,  
and cancel -g if the GID is already used  
-g, --gid GID              use GID for the new group  
-h, --help                 display this help message and exit  
-K, --key KEY=VALUE        override /etc/login.defs defaults  
-o, --non-unique           allow to create groups with duplicate  
(non-unique) GID  
-p, --password PASSWORD    use this encrypted password for the new group  
-r, --system               create a system account  
-R, --root CHROOT_DIR      directory to chroot into  
-P, --prefix PREFIX_DIR    directory prefix  
-U, --users USERS          list of user members of this group  
  
(antoinette-elam@Kali)-[~]  
$
```

```
antoinette-elam@Kali: ~
File Actions Edit View Help
Options:
-f, --force                exit successfully if the group already exists
-g, --gid GID             and cancel -g if the GID is already used
-h, --help                use GID for the new group
-K, --key KEY=VALUE       display this help message and exit
-o, --non-unique          override /etc/login.defs defaults
-p, --password PASSWORD   allow to create groups with duplicate
-r, --system              (non-unique) GID
-R, --root CHROOT_DIR     use this encrypted password for the new group
-P, --prefix PREFIX_DIR   create a system account
-U, --users USERS         directory to chroot into
                        directory prefix
                        list of user members of this group

(antoinette-elam@Kali)-[~]
$ grep "^test:" /etc/group

(antoinette-elam@Kali)-[~]
$ sudo groupadd -g 01269754 test

(antoinette-elam@Kali)-[~]
$ grep "^test:" /etc/group
test:x:1269754:

(antoinette-elam@Kali)-[~]
$
```

```
antoinette-elam@Kali: ~
File Actions Edit View Help

-g, --gid GID          and cancel -g if the GID is already used
-h, --help            use GID for the new group
-K, --key KEY=VALUE   display this help message and exit
-o, --non-unique       override /etc/login.defs defaults
                       allow to create groups with duplicate
                       (non-unique) GID
-p, --password PASSWORD use this encrypted password for the new group
-r, --system          create a system account
-R, --root CHROOT_DIR directory to chroot into
-P, --prefix PREFIX_DIR directory prefix
-U, --users USERS     list of user members of this group

(antoinette-elam@Kali)-[~]
$ grep "^test:" /etc/group

(antoinette-elam@Kali)-[~]
$ sudo groupadd -g 01269754 test

(antoinette-elam@Kali)-[~]
$ grep "^test:" /etc/group
test:x:1269754:

(antoinette-elam@Kali)-[~]
$ sudo groupmod -n newtest test

(antoinette-elam@Kali)-[~]
$
```

```
antoinette-elam@Kali: ~  
File Actions Edit View Help  
-K, --key KEY=VALUE          override /etc/login.defs defaults  
-o, --non-unique              allow to create groups with duplicate  
                              (non-unique) GID  
-p, --password PASSWORD      use this encrypted password for the new group  
-r, --system                  create a system account  
-R, --root CHROOT_DIR        directory to chroot into  
-P, --prefix PREFIX_DIR      directory prefix  
-U, --users USERS             list of user members of this group  
  
(antoinette-elam@Kali)-[~]  
$ grep "^test:" /etc/group  
  
(antoinette-elam@Kali)-[~]  
$ sudo groupadd -g 01269754 test  
  
(antoinette-elam@Kali)-[~]  
$ grep "^test:" /etc/group  
test:x:1269754:  
  
(antoinette-elam@Kali)-[~]  
$ sudo groupmod -n newtest test  
  
(antoinette-elam@Kali)-[~]  
$ sudo usermod -aG newtest aelam010  
  
(antoinette-elam@Kali)-[~]  
$
```

```
antoinette-elam@Kali: ~
File Actions Edit View Help
-P, --prefix PREFIX_DIR    directory prefix
-U, --users USERS           list of user members of this group

(antoinette-elam@Kali)-[~]
$ grep "^test:" /etc/group

(antoinette-elam@Kali)-[~]
$ sudo groupadd -g 01269754 test

(antoinette-elam@Kali)-[~]
$ grep "^test:" /etc/group
test:x:1269754:

(antoinette-elam@Kali)-[~]
$ sudo groupmod -n newtest test

(antoinette-elam@Kali)-[~]
$ sudo usermod -aG newtest aelam010

(antoinette-elam@Kali)-[~]
$ sudo -u aelam010 touch /home/aelam010/testfile

(antoinette-elam@Kali)-[~]
$ sudo chgrp newtest /home/aelam010/testfile

(antoinette-elam@Kali)-[~]
$
```

```
aelam010@Kali: ~  
File Actions Edit View Help  
└─$ grep "^test:" /etc/group  
test:x:1269754:  
  
(antoinette-elam@Kali)-[~]  
└─$ sudo groupmod -n newtest test  
  
(antoinette-elam@Kali)-[~]  
└─$ sudo usermod -aG newtest aelam010  
  
(antoinette-elam@Kali)-[~]  
└─$ sudo -u aelam010 touch /home/aelam010/testfile  
  
(antoinette-elam@Kali)-[~]  
└─$ sudo chgrp newtest /home/aelam010/testfile  
  
(antoinette-elam@Kali)-[~]  
└─$ ls -l /home/aelam010/testfile  
ls: cannot access '/home/aelam010/testfile': Permission denied  
  
(antoinette-elam@Kali)-[~]  
└─$ su - aelam010  
Password:  
(aelam010@Kali)-[~]  
└─$ ls -l ~/testfile  
-rw-rw-r-- 1 aelam010 newtest 0 Sep 22 08:18 /home/aelam010/testfile  
  
(aelam010@Kali)-[~]  
└─$ █  
  
(antoinette-elam@Kali)-[~]  
└─$ sudo userdel -r aelam010  
userdel: aelam010 mail spool (/var/mail/aelam010) not found  
  
(antoinette-elam@Kali)-[~]  
└─$ █
```