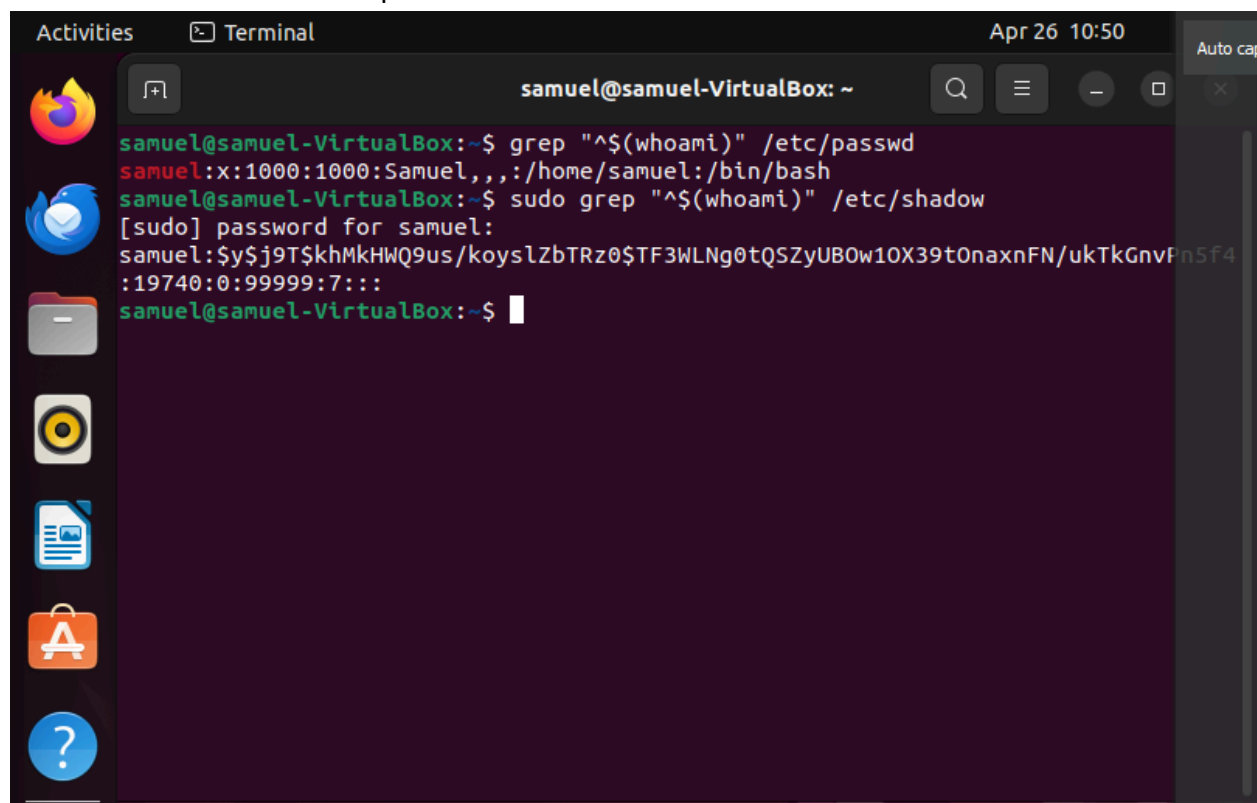


Lab 4 Task A and B All steps in order



The image shows a terminal window titled "Terminal" with the current user and host as "samuel@samuel-VirtualBox". The terminal displays the following commands and their outputs:

```

samuel@samuel-VirtualBox:~$ grep "^$(whoami)" /etc/passwd
samuel:x:1000:1000:Samuel,,,:/home/samuel:/bin/bash
samuel@samuel-VirtualBox:~$ sudo grep "^$(whoami)" /etc/shadow
[sudo] password for samuel:
samuel:$y$j9T$khMkHWQ9us/koySLzbTRz0$TF3WLNgt0tQSZyUB0w10X39t0naxnFN/ukTkGnvPn5f4
:19740:0:99999:7:::
samuel@samuel-VirtualBox:~$

```

The terminal output shows the user "samuel" with UID 1000 and GID 1000, located at /home/samuel. The shadow file entry for "samuel" shows a hashed password, a last password change date of 19740, an expiration date of 0, a warning period of 99999, and a lockout period of 7 days.

Activities Terminal Apr 26 10:48

```

samuel@samuel-VirtualBox: ~
samuel@samuel-VirtualBox:~$ grep "^$(whoami)" /etc/passwd
samuel:x:1000:1000:Samuel,,,:/home/samuel:/bin/bash
samuel@samuel-VirtualBox:~$

```

```

[sudo] password for samuel:
samuel:$y$j9T$khMkHWQ9us/koyslZbTRz0$TF3WLNg0tQSZyUB0w10X39t0naxnFN/ukTkGnvFn5f4
:19740:0:99999:7:::
samuel@samuel-VirtualBox:~$ sudo useradd -m -d /home/xxxxx xxxxx
samuel@samuel-VirtualBox:~$ sudo useradd -m -d /home/sbaid001 sbaid001
samuel@samuel-VirtualBox:~$ sudo passwd sbaid001
New password:
BAD PASSWORD: The password is shorter than 8 characters
Retype new password:
Sorry, passwords do not match.
New password:
Retype new password:
Sorry, passwords do not match.
New password:
BAD PASSWORD: The password is shorter than 8 characters
Retype new password:
Sorry, passwords do not match.
passwd: Have exhausted maximum number of retries for service
passwd: password unchanged
samuel@samuel-VirtualBox:~$ sudo passwd sbaid001
New password:
Retype new password:
passwd: password updated successfully
samuel@samuel-VirtualBox:~$

```

```
Activities Terminal Apr 26 10:59 Auto
samuel@samuel-VirtualBox: ~
samuel@samuel-VirtualBox:~$ sudo useradd -m -d /home/xxxxx xxxxx
samuel@samuel-VirtualBox:~$ sudo useradd -m -d /home/sbaid001 sbaid001
samuel@samuel-VirtualBox:~$ sudo passwd sbaid001
New password:
BAD PASSWORD: The password is shorter than 8 characters
Retype new password:
Sorry, passwords do not match.
New password:
Retype new password:
Sorry, passwords do not match.
New password:
BAD PASSWORD: The password is shorter than 8 characters
Retype new password:
Sorry, passwords do not match.
passwd: Have exhausted maximum number of retries for service
passwd: password unchanged
samuel@samuel-VirtualBox:~$ sudo passwd sbaid001
New password:
Retype new password:
passwd: password updated successfully
samuel@samuel-VirtualBox:~$ sudo chsh -s/bin/bash sbaid001
samuel@samuel-VirtualBox:~$ grep sbaid001 /etc/passwd
sbaid001:x:1002:1005:./home/sbaid001:/bin/bash
samuel@samuel-VirtualBox:~$
```

```
Activities Terminal Apr 26 11:02 Auto ca
samuel@samuel-VirtualBox: ~
New password:
Retype new password:
Sorry, passwords do not match.
New password:
BAD PASSWORD: The password is shorter than 8 characters
Retype new password:
Sorry, passwords do not match.
passwd: Have exhausted maximum number of retries for service
passwd: password unchanged
samuel@samuel-VirtualBox:~$ sudo passwd sbaid001
New password:
Retype new password:
passwd: password updated successfully
samuel@samuel-VirtualBox:~$ sudo chsh -s/bin/bash sbaid001
samuel@samuel-VirtualBox:~$ grep sbaid001 /etc/passwd
sbaid001:x:1002:1005:./home/sbaid001:/bin/bash
samuel@samuel-VirtualBox:~$ sudo grep "^xxxxx:" /etc/shadow
xxxxx:!:19839:0:99999:7:::
samuel@samuel-VirtualBox:~$ sudo grep "^sbaid001:" /etc/shadow
sudo: grep^sbaid001:/etc/shadow: command not found
samuel@samuel-VirtualBox:~$ sudo grep "^sbaid001:" /etc/shadow
sbaid001:$y$j9T$/4yFCugvYtHy6vFk4QfCL0$07oVrDMG2faDoYRq8CFjQsdar3.kzSzXsebLqKkDE
Y7:19839:0:99999:7:::
samuel@samuel-VirtualBox:~$
```

```
Activities Terminal Apr 26 11:05 Auto capture k
samuel@samuel-VirtualBox: ~
New password:
BAD PASSWORD: The password is shorter than 8 characters
Retype new password:
Sorry, passwords do not match.
passwd: Have exhausted maximum number of retries for service
passwd: password unchanged
samuel@samuel-VirtualBox:~$ sudo passwd sbaid001
New password:
Retype new password:
passwd: password updated successfully
samuel@samuel-VirtualBox:~$ sudo chsh -s/bin/bash sbaid001
samuel@samuel-VirtualBox:~$ grep sbaid001 /etc/passwd
sbaid001:x:1002:1005:~/home/sbaid001:/bin/bash
samuel@samuel-VirtualBox:~$ sudo grep "^xxxxx:" /etc/shadow
xxxxx!:19839:0:99999:7:::
samuel@samuel-VirtualBox:~$ sudo grep "^sbaid001:"/etc/shadow
sudo: grep^sbaid001:/etc/shadow: command not found
samuel@samuel-VirtualBox:~$ sudo grep "^sbaid001:" /etc/shadow
sbaid001:$y$j9T$/4yFCugvYtHy6vFk4QfCL0$07oVrDMG2faDoYRq8CFjQsdar3.kzSzXsebLokkdE
Y7:19839:0:99999:7:::
samuel@samuel-VirtualBox:~$ sudo usermod -aG sudo xxxxxx
usermod: user 'xxxxxx' does not exist
samuel@samuel-VirtualBox:~$ sudo usermod -aG sudo sbaid001
samuel@samuel-VirtualBox:~$
```

```
Activities Terminal Apr 26 10:56 Auto capt
samuel@samuel-VirtualBox: ~
samuel@samuel-VirtualBox:~$ grep "^$(whoami)" /etc/passwd
samuel:x:1000:1000:Samuel,,,:/home/samuel:/bin/bash
samuel@samuel-VirtualBox:~$ sudo grep "^$(whoami)" /etc/shadow
[sudo] password for samuel:
samuel:$y$j9T$khMkHWQ9us/koyslZbTRz0$TF3WLNg0tQSZyUB0w10X39t0naxnFN/ukTkGnvPn5f4
:19740:0:99999:7:::
samuel@samuel-VirtualBox:~$ sudo useradd -m -d /home/xxxxx xxxxx
samuel@samuel-VirtualBox:~$ sudo useradd -m -d /home/sbaid001 sbaid001
samuel@samuel-VirtualBox:~$ sudo passwd sbaid001
New password:
BAD PASSWORD: The password is shorter than 8 characters
Retype new password:
Sorry, passwords do not match.
New password:
Retype new password:
Sorry, passwords do not match.
New password:
BAD PASSWORD: The password is shorter than 8 characters
Retype new password:
Sorry, passwords do not match.
passwd: Have exhausted maximum number of retries for service
passwd: password unchanged
Help
samuel@samuel-VirtualBox:~$ sudo passwd sbaid001
New password:
```

```
Activities Terminal Apr 26 11:12 Auto capture
sbaid001@samuel-VirtualBox: ~
Retype new password:
passwd: password updated successfully
samuel@samuel-VirtualBox:~$ sudo chsh -s/bin/bash sbaid001
samuel@samuel-VirtualBox:~$ grep sbaid001 /etc/passwd
sbaid001:x:1002:1005::/home/sbaid001:/bin/bash
samuel@samuel-VirtualBox:~$ sudo grep "^xxxxx:" /etc/shadow
xxxxx!:19839:0:99999:7:::
samuel@samuel-VirtualBox:~$ sudo grep "^sbaid001:" /etc/shadow
sudo: grep^sbaid001:/etc/shadow: command not found
samuel@samuel-VirtualBox:~$ sudo grep "^sbaid001:" /etc/shadow
sbaid001:$y$j9T$/4yFCugvYtHy6vFk4QfCL0$07oVrDMG2faDoYRq8CFjQsdar3.kzSzXsebLqKkdE
Y7:19839:0:99999:7:::
samuel@samuel-VirtualBox:~$ sudo usermod -aG sudo xxxxxx
usermod: user 'xxxxxx' does not exist
samuel@samuel-VirtualBox:~$ sudo usermod -aG sudo sbaid001
samuel@samuel-VirtualBox:~$ su - sbaid001
Password:
To run a command as administrator (user "root"), use "sudo <command>".
See "man sudo_root" for details.

sbaid001@samuel-VirtualBox:~$ cd
sbaid001@samuel-VirtualBox:~$ echo $SHELL
/bin/bash
sbaid001@samuel-VirtualBox:~$
```

```
Activities Terminal Apr 26 11:13 Auto capture
sbaid001@samuel-VirtualBox: ~
samuel@samuel-VirtualBox:~$ sudo chsh -s/bin/bash sbaid001
samuel@samuel-VirtualBox:~$ grep sbaid001 /etc/passwd
sbaid001:x:1002:1005::/home/sbaid001:/bin/bash
samuel@samuel-VirtualBox:~$ sudo grep "^xxxxx:" /etc/shadow
xxxxx!:19839:0:99999:7:::
samuel@samuel-VirtualBox:~$ sudo grep "^sbaid001:" /etc/shadow
sudo: grep^sbaid001:/etc/shadow: command not found
samuel@samuel-VirtualBox:~$ sudo grep "^sbaid001:" /etc/shadow
sbaid001:$y$j9T$/4yFCugvYtHy6vFk4QfCL0$07oVrDMG2faDoYRq8CFjQsdar3.kzSzXsebLqKkdE
Y7:19839:0:99999:7:::
samuel@samuel-VirtualBox:~$ sudo usermod -aG sudo xxxxxx
usermod: user 'xxxxxx' does not exist
samuel@samuel-VirtualBox:~$ sudo usermod -aG sudo sbaid001
samuel@samuel-VirtualBox:~$ su - sbaid001
Password:
To run a command as administrator (user "root"), use "sudo <command>".
See "man sudo_root" for details.

sbaid001@samuel-VirtualBox:~$ cd
sbaid001@samuel-VirtualBox:~$ echo $SHELL
/bin/bash
sbaid001@samuel-VirtualBox:~$ id
uid=1002(sbaid001) gid=1005(sbaid001) groups=1005(sbaid001),27(sudo)
sbaid001@samuel-VirtualBox:~$
```

```
Activities Terminal Apr 26 11:06 Auto capt
sbaid001@samuel-VirtualBox: ~
passwd: password unchanged
samuel@samuel-VirtualBox:~$ sudo passwd sbaid001
New password:
Retype new password:
passwd: password updated successfully
samuel@samuel-VirtualBox:~$ sudo chsh -s/bin/bash sbaid001
samuel@samuel-VirtualBox:~$ grep sbaid001 /etc/passwd
sbaid001:x:1002:1005::/home/sbaid001:/bin/bash
samuel@samuel-VirtualBox:~$ sudo grep "^xxxxx:" /etc/shadow
xxxxx:!:19839:0:99999:7:::
samuel@samuel-VirtualBox:~$ sudo grep "^sbaid001:" /etc/shadow
sudo: grep^sbaid001:/etc/shadow: command not found
samuel@samuel-VirtualBox:~$ sudo grep "^sbaid001:" /etc/shadow
sbaid001:$y$j9T$/4yFCugvYtHy6vFk4QfCL0$07oVrDMG2faDoYRq8CFjQsdar3.kzSzXsebLcKkdE
Y7:19839:0:99999:7:::
samuel@samuel-VirtualBox:~$ sudo usermod -aG sudo xxxxxx
usermod: user 'xxxxxx' does not exist
samuel@samuel-VirtualBox:~$ sudo usermod -aG sudo sbaid001
samuel@samuel-VirtualBox:~$ su - sbaid001
Password:
To run a command as administrator (user "root"), use "sudo <command>".
See "man sudo_root" for details.
sbaid001@samuel-VirtualBox:~$
```

```
Activities Terminal Apr 26 11:15 Auto capture
sbaid001@samuel-VirtualBox: ~
sbaid001:x:1002:1005::/home/sbaid001:/bin/bash
samuel@samuel-VirtualBox:~$ sudo grep "^xxxxx:" /etc/shadow
xxxxx:!:19839:0:99999:7:::
samuel@samuel-VirtualBox:~$ sudo grep "^sbaid001:" /etc/shadow
sudo: grep^sbaid001:/etc/shadow: command not found
samuel@samuel-VirtualBox:~$ sudo grep "^sbaid001:" /etc/shadow
sbaid001:$y$j9T$/4yFCugvYtHy6vFk4QfCL0$07oVrDMG2faDoYRq8CFjQsdar3.kzSzXsebLcKkdE
Y7:19839:0:99999:7:::
samuel@samuel-VirtualBox:~$ sudo usermod -aG sudo xxxxxx
usermod: user 'xxxxxx' does not exist
samuel@samuel-VirtualBox:~$ sudo usermod -aG sudo sbaid001
samuel@samuel-VirtualBox:~$ su - sbaid001
Password:
To run a command as administrator (user "root"), use "sudo <command>".
See "man sudo_root" for details.
sbaid001@samuel-VirtualBox:~$ cd
sbaid001@samuel-VirtualBox:~$ echo $SHELL
/bin/bash
sbaid001@samuel-VirtualBox:~$ id
uid=1002(sbaid001) gid=1005(sbaid001) groups=1005(sbaid001),27(sudo)
sbaid001@samuel-VirtualBox:~$ id root
uid=0(root) gid=0(root) groups=0(root)
sbaid001@samuel-VirtualBox:~$
```

```
Activities Terminal Apr 26 11:16 Auto capt
sbaid001@samuel-VirtualBox: ~
xxxxx:!:19839:0:99999:7:::
samuel@samuel-VirtualBox:~$ sudo grep "^sbaid001:"/etc/shadow
sudo: grep^sbaid001:/etc/shadow: command not found
samuel@samuel-VirtualBox:~$ sudo grep "^sbaid001:" /etc/shadow
sbaid001:$y$j9T$/4yFCugvYtHy6vFk4QfCL0$07oVrDMG2faDoYRq8CFjQsdar3.kzSzXsebLcKkdE
Y7:19839:0:99999:7:::
samuel@samuel-VirtualBox:~$ sudo usermod -aG sudo xxxxxx
usermod: user 'xxxxxx' does not exist
samuel@samuel-VirtualBox:~$ sudo usermod -aG sudo sbaid001
samuel@samuel-VirtualBox:~$ su - sbaid001
Password:
To run a command as administrator (user "root"), use "sudo <command>".
See "man sudo_root" for details.
sbaid001@samuel-VirtualBox:~$ cd
sbaid001@samuel-VirtualBox:~$ echo $SHELL
/bin/bash
sbaid001@samuel-VirtualBox:~$ id
uid=1002(sbaid001) gid=1005(sbaid001) groups=1005(sbaid001),27(sudo)
sbaid001@samuel-VirtualBox:~$ id root
uid=0(root) gid=0(root) groups=0(root)
sbaid001@samuel-VirtualBox:~$ ls -1 /etc/group
/etc/group
sbaid001@samuel-VirtualBox:~$
```

```
Activities Terminal Apr 26 11:22 Auto capt
sbaid001@samuel-VirtualBox: ~
samuel@samuel-VirtualBox:~$ su - sbaid001
Password:
To run a command as administrator (user "root"), use "sudo <command>".
See "man sudo_root" for details.
sbaid001@samuel-VirtualBox:~$ cd
sbaid001@samuel-VirtualBox:~$ echo $SHELL
/bin/bash
sbaid001@samuel-VirtualBox:~$ id
uid=1002(sbaid001) gid=1005(sbaid001) groups=1005(sbaid001),27(sudo)
sbaid001@samuel-VirtualBox:~$ id root
uid=0(root) gid=0(root) groups=0(root)
sbaid001@samuel-VirtualBox:~$ ls -1 /etc/group
/etc/group
sbaid001@samuel-VirtualBox:~$ sudo groupadd -g 01205199 test
[sudo] password for sbaid001:
Sorry, try again.
[sudo] password for sbaid001:
Sorry, try again.
[sudo] password for sbaid001:
sbaid001@samuel-VirtualBox:~$ grep '^test:' /etc/group
test:x:1205199:
sbaid001@samuel-VirtualBox:~$ sudo groupmod -n newtest test
sbaid001@samuel-VirtualBox:~$
```

```
Activities Terminal Apr 26 11:21 Auto capture keyboard
sbaid001@samuel-VirtualBox: ~
samuel@samuel-VirtualBox:~$ sudo usermod -aG sudo sbaid001
samuel@samuel-VirtualBox:~$ su - sbaid001
Password:
To run a command as administrator (user "root"), use "sudo <command>".
See "man sudo_root" for details.
sbaid001@samuel-VirtualBox:~$ cd
sbaid001@samuel-VirtualBox:~$ echo $SHELL
/bin/bash
sbaid001@samuel-VirtualBox:~$ id
uid=1002(sbaid001) gid=1005(sbaid001) groups=1005(sbaid001),27(sudo)
sbaid001@samuel-VirtualBox:~$ id root
uid=0(root) gid=0(root) groups=0(root)
sbaid001@samuel-VirtualBox:~$ ls -l /etc/group
-rw-r--r-- 1 root root 1205199 Apr 26 11:21 /etc/group
sbaid001@samuel-VirtualBox:~$ sudo groupadd -g 01205199 test
[sudo] password for sbaid001:
Sorry, try again.
[sudo] password for sbaid001:
Sorry, try again.
[sudo] password for sbaid001:
sbaid001@samuel-VirtualBox:~$ grep '^test:' /etc/group
test:x:1205199:
sbaid001@samuel-VirtualBox:~$
```

```
Activities Terminal Apr 26 11:24 Auto capture keyboard
sbaid001@samuel-VirtualBox: ~
Password:
To run a command as administrator (user "root"), use "sudo <command>".
See "man sudo_root" for details.
sbaid001@samuel-VirtualBox:~$ cd
sbaid001@samuel-VirtualBox:~$ echo $SHELL
/bin/bash
sbaid001@samuel-VirtualBox:~$ id
uid=1002(sbaid001) gid=1005(sbaid001) groups=1005(sbaid001),27(sudo)
sbaid001@samuel-VirtualBox:~$ id root
uid=0(root) gid=0(root) groups=0(root)
sbaid001@samuel-VirtualBox:~$ ls -l /etc/group
-rw-r--r-- 1 root root 1205199 Apr 26 11:24 /etc/group
sbaid001@samuel-VirtualBox:~$ sudo groupadd -g 01205199 test
[sudo] password for sbaid001:
Sorry, try again.
[sudo] password for sbaid001:
Sorry, try again.
[sudo] password for sbaid001:
sbaid001@samuel-VirtualBox:~$ grep '^test:' /etc/group
test:x:1205199:
sbaid001@samuel-VirtualBox:~$ sudo groupmod -n newtest test
sbaid001@samuel-VirtualBox:~$ sudo usermod -aG newtest sbaid001
sbaid001@samuel-VirtualBox:~$
```

```
Activities Terminal Apr 26 11:31 Auto capt
sbaid001@samuel-VirtualBox: ~
sbaid001@samuel-VirtualBox:~$ cd
sbaid001@samuel-VirtualBox:~$ echo $SHELL
/bin/bash
sbaid001@samuel-VirtualBox:~$ id
uid=1002(sbaid001) gid=1005(sbaid001) groups=1005(sbaid001),27(sudo)
sbaid001@samuel-VirtualBox:~$ id root
uid=0(root) gid=0(root) groups=0(root)
sbaid001@samuel-VirtualBox:~$ ls -1 /etc/group
/etc/group
sbaid001@samuel-VirtualBox:~$ sudo groupadd -g 01205199 test
[sudo] password for sbaid001:
Sorry, try again.
[sudo] password for sbaid001:
Sorry, try again.
[sudo] password for sbaid001:
sbaid001@samuel-VirtualBox:~$ grep '^test:' /etc/group
test:x:1205199:
sbaid001@samuel-VirtualBox:~$ sudo groupmod -n newtest test
sbaid001@samuel-VirtualBox:~$ sudo usermod -aG newtest sbaid001
sbaid001@samuel-VirtualBox:~$ touch ~/testfile
sbaid001@samuel-VirtualBox:~$ sudo chown :newtest ~/testfile
sbaid001@samuel-VirtualBox:~$ ls -1 ~/testfile
/home/sbaid001/testfile
sbaid001@samuel-VirtualBox:~$
```

```
Activities Terminal Apr 26 11:32 Auto capt
sbaid001@samuel-VirtualBox: ~
sbaid001@samuel-VirtualBox:~$ id
uid=1002(sbaid001) gid=1005(sbaid001) groups=1005(sbaid001),27(sudo)
sbaid001@samuel-VirtualBox:~$ id root
uid=0(root) gid=0(root) groups=0(root)
sbaid001@samuel-VirtualBox:~$ ls -1 /etc/group
/etc/group
sbaid001@samuel-VirtualBox:~$ sudo groupadd -g 01205199 test
[sudo] password for sbaid001:
Sorry, try again.
[sudo] password for sbaid001:
Sorry, try again.
[sudo] password for sbaid001:
sbaid001@samuel-VirtualBox:~$ grep '^test:' /etc/group
test:x:1205199:
sbaid001@samuel-VirtualBox:~$ sudo groupmod -n newtest test
sbaid001@samuel-VirtualBox:~$ sudo usermod -aG newtest sbaid001
sbaid001@samuel-VirtualBox:~$ touch ~/testfile
sbaid001@samuel-VirtualBox:~$ sudo chown :newtest ~/testfile
sbaid001@samuel-VirtualBox:~$ ls -1 ~/testfile
/home/sbaid001/testfile
sbaid001@samuel-VirtualBox:~$ sudo groupdel newtest
sbaid001@samuel-VirtualBox:~$ sudo groupdel newtest
groupdel: group 'newtest' does not exist
sbaid001@samuel-VirtualBox:~$
```