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Final Exam

create multiple users and groups with bash scripting and will make

User and Group Management Script

- 1. Add User**
- 2. Modify User**
- 3. Delete User**
- 4. Add Group**
- 5. modify Group**
- 6. Delete Group**
- 7. Delete User from Group**
- 8. Add user to group**
- 9. Exit**

My bash scripts

#!/bin/bash

#firstlly I will create function to add a new user

```
add_user() {  
    read -p "please enter username: " username  
    useradd $username  
    echo "User $username added successfully."  
}
```

#then I create function to modify an existing user

```
modify_user() {  
    read -p "please enter username to modify: " username  
    usermod -l $username $username  
    echo "User $username modified successfully."  
}
```

#then I create function to delete an existing user

```
delete_user() {  
    read -p "please enter username to delete: " username  
    userdel -r $username  
    echo "User $username deleted successfully."  
}
```

then create function to add a new group

```
add_group() {  
    read -p "please enter group name: " groupname  
    groupadd $groupname  
    echo "Group $groupname added successfully."  
}
```

then create function to delete an existing group

```
delete_group() {
```

```
read -p "please enter group name to delete: " groupname
groupdel $groupname
echo "Group $groupname deleted successfully."
}

#then create function to add a user to a group
add_user_to_group() {
    read -p "please enter username: " username
    read -p "please enter group name: " groupname
    usermod -aG $groupname $username
    echo "User $username added to group $groupname successfully."
}

# then create function to delete a user from a group
delete_user_from_group() {
    read -p "please enter username: " username
    read -p "please enter group name: " groupname
    deluser $username $groupname
    echo "User $username removed from group $groupname
successfully."
}

# Main minue to selct what i need to do
```

```
# Main minue to selct what i need to do
while true; do

    echo "Select an option:"
    echo "1. Add User"
    echo "2. Modify User"
    echo "3. Delete User"
    echo "4. Add Group"
    echo "5. Modify Group"
    echo "6. Delete Group"
    echo "7. Add User to Group"
    echo "8. Delete User from Group"
    echo "9. Exit"

    read -p "please enter your choice: " choice

    case $choice in
        1)
            add_user
            ;;
        2)
            modify_user
            ;;
        3)
```

```
delete_user
```

```
;;
```

```
4)
```

```
add_group
```

```
;;
```

```
5)
```

```
modify_group
```

```
;;
```

```
6)
```

```
delete_group
```

```
;;
```

```
7)
```

```
add_user_to_group
```

```
;;
```

```
8)
```

```
delete_user_from_group
```

```
;;
```

```
9)
```

```
echo "Exiting script."
```

```
exit 0
```

```
;;
```

```
*)
```

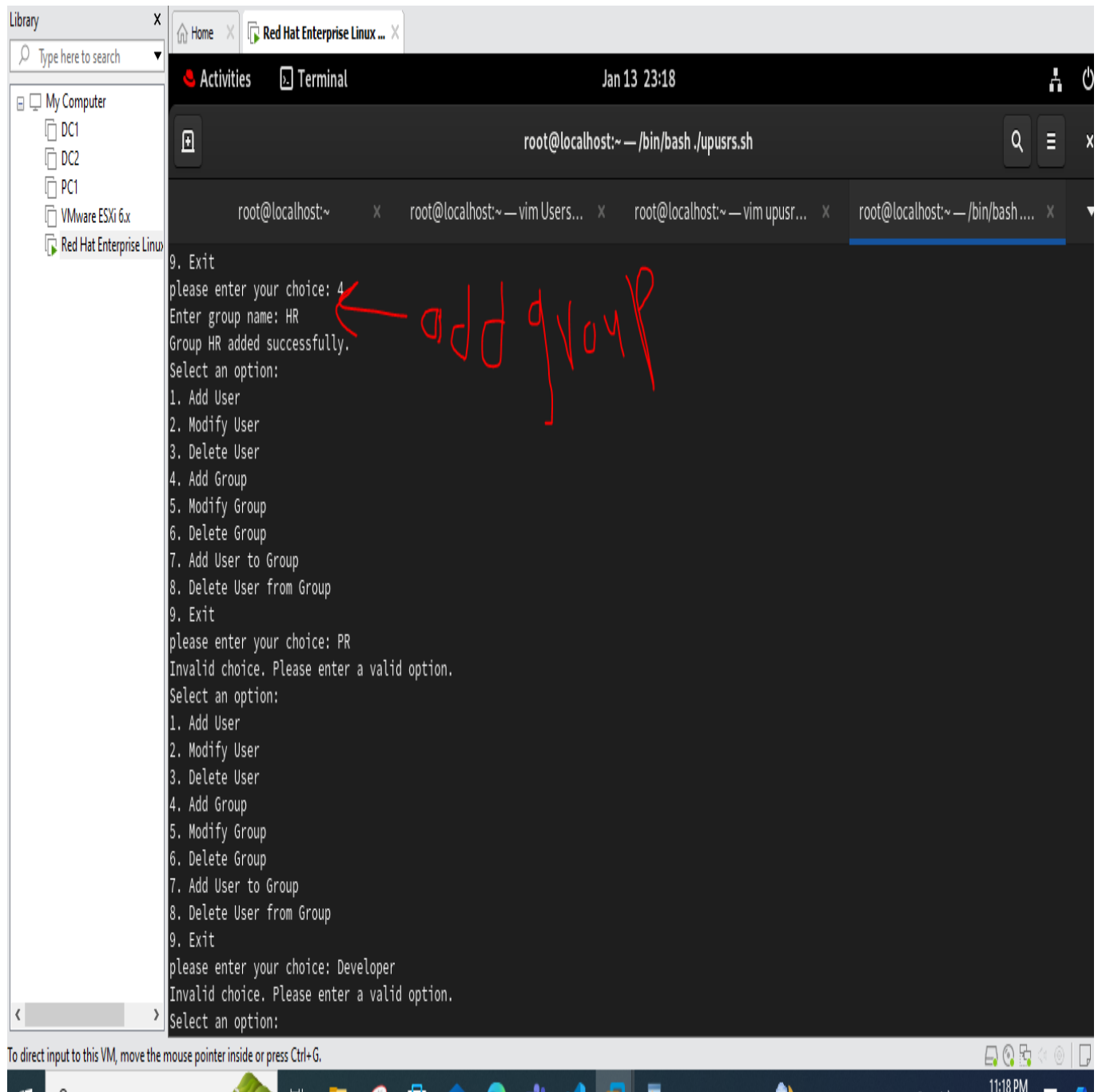
```
    echo "Invalid choice. Please enter a valid option."
```

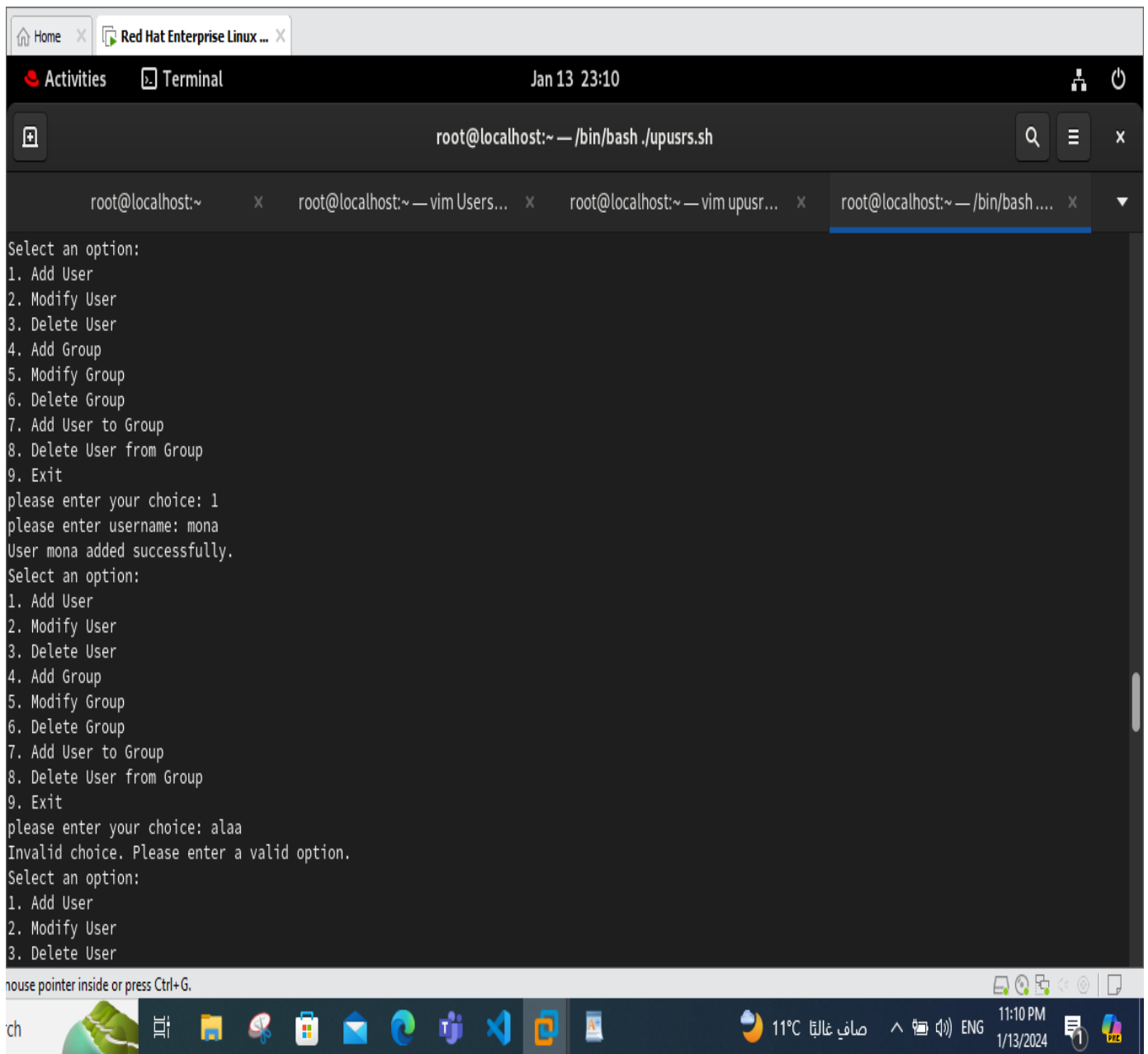
```
;;
```

```
esac
```

```
done
```

Photo for testing





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 - DC1
 - DC2
 - PC1
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 - Red Hat Enterprise Linux

Home x Red Hat Enterprise Linux ... x

Activities Terminal Jan 13 23:12

root@localhost:~—/bin/bash ./upusr.sh

root@localhost:~ x root@localhost:~—vim Users... x root@localhost:~—vim upusr... x root@localhost:~—/bin/bash x

5. Modify Group
6. Delete Group
7. Add User to Group
8. Delete User from Group
9. Exit
please enter your choice: alaa *add another*
Invalid choice. Please enter a valid option.
Select an option:
1. Add User
2. Modify User
3. Delete User
4. Add Group
5. Modify Group
6. Delete Group
7. Add User to Group
8. Delete User from Group
9. Exit
please enter your choice: 1
please enter username: sama
User sama added successfully.
Select an option:
1. Add User
2. Modify User
3. Delete User
4. Add Group
5. Modify Group
6. Delete Group
7. Add User to Group
8. Delete User from Group

To return to your computer, move the mouse pointer outside or press Ctrl+Alt.

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Library X

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 - Red Hat Enterprise Linux

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Activities Terminal Jan 13 23:15

root@localhost:~ — /bin/bash ./upusr.sh

root@localhost:~ x root@localhost:~ — vim Users... x root@localhost:~ — vim upusr... x root@localhost:~ — /bin/bash x

User alaa alia modified successfully. *← ↑ For Mod*

Select an option:

1. Add User
2. Modify User
3. Delete User
4. Add Group
5. Modify Group
6. Delete Group
7. Add User to Group
8. Delete User from Group
9. Exit

please enter your choice: 3 *← to del*

please enter username to delete: sama

User sama deleted successfully.

Select an option:

1. Add User
2. Modify User
3. Delete User
4. Add Group
5. Modify Group
6. Delete Group
7. Add User to Group
8. Delete User from Group
9. Exit

please enter your choice: 4

Enter group name: HR

Group HR added successfully.

Select an option:

To direct input to this VM, move the mouse pointer inside or press Ctrl+G.

Type here to search

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Library

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Activities Terminal Jan 13 23:32

root@localhost:~ — /bin/bash ./upusrs.sh

root@localhost:~ x root@localhost:~ — vim Users... x root@localhost:~ — vim upusr... x root@localhost:~ — /bin/bash x

```
7. Add User to Group
8. Delete User from Group
9. Exit
please enter your choice: ^C
[root@localhost ~]# ./upusrs.sh
Select an option:
1. Add User
2. Modify User
3. Delete User
4. Add Group
5. Modify Group
6. Delete Group
7. Add User to Group
8. Delete User from Group
9. Exit
please enter your choice: 6
Enter group name to delete: security
Group security deleted successfully.
Select an option:
1. Add User
2. Modify User
3. Delete User
4. Add Group
5. Modify Group
6. Delete Group
7. Add User to Group
8. Delete User from Group
9. Exit
please enter your choice: 
```

To direct input to this VM, move the mouse pointer inside or press Ctrl+G.

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Library x

Type here to search

My Computer

- DC1
- DC2
- PC1
- VMware ESXi 6.x
- Red Hat Enterprise Linux

Home x Red Hat Enterprise Linux ... x

Activities Terminal Jan 13 23:13

root@localhost:~ — /bin/bash ./upusr.sh

root@localhost:~ x root@localhost:~ — vim Users... x root@localhost:~ — vim upusr... x root@localhost:~ — /bin/bash x

1. Add User
2. Modify User
3. Delete User
4. Add Group
5. Modify Group
6. Delete Group
7. Add User to Group
8. Delete User from Group
9. Exit

please enter your choice: 2

please enter username to modify: alaa alia

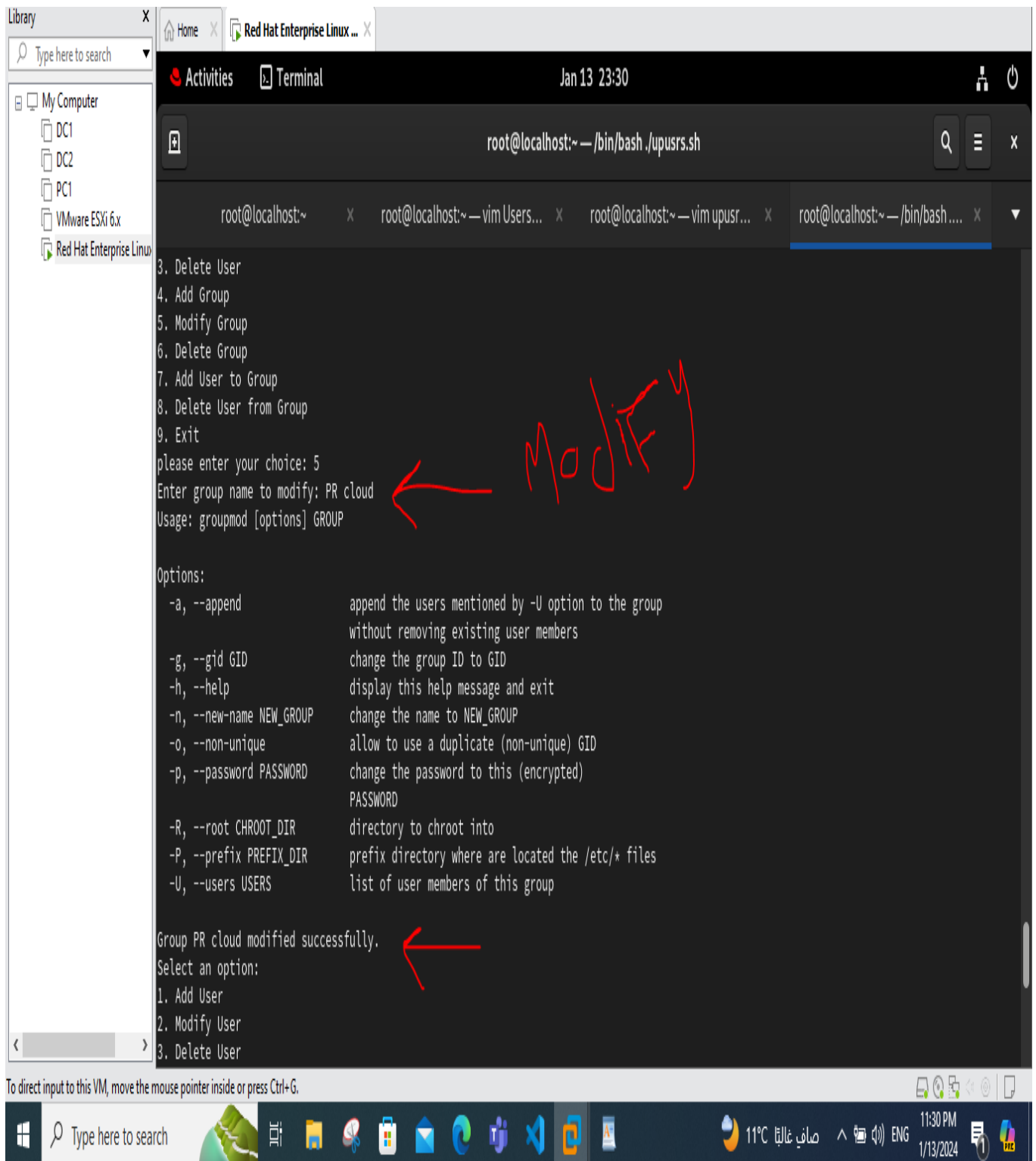
Usage: usermod [options] LOGIN

Options:

-b, --badname	allow bad names
-c, --comment COMMENT	new value of the GECOS field
-d, --home HOME_DIR	new home directory for the user account
-e, --expiredate EXPIRE_DATE	set account expiration date to EXPIRE_DATE
-f, --inactive INACTIVE	set password inactive after expiration to INACTIVE
-g, --gid GROUP	force use GROUP as new primary group
-G, --groups GROUPS	new list of supplementary GROUPS
-a, --append	append the user to the supplemental GROUPS mentioned by the -G option without removing the user from other groups
-h, --help	display this help message and exit
-l, --login NEW_LOGIN	new value of the login name
-L, --lock	lock the user account
-m, --move-home	move contents of the home directory to the

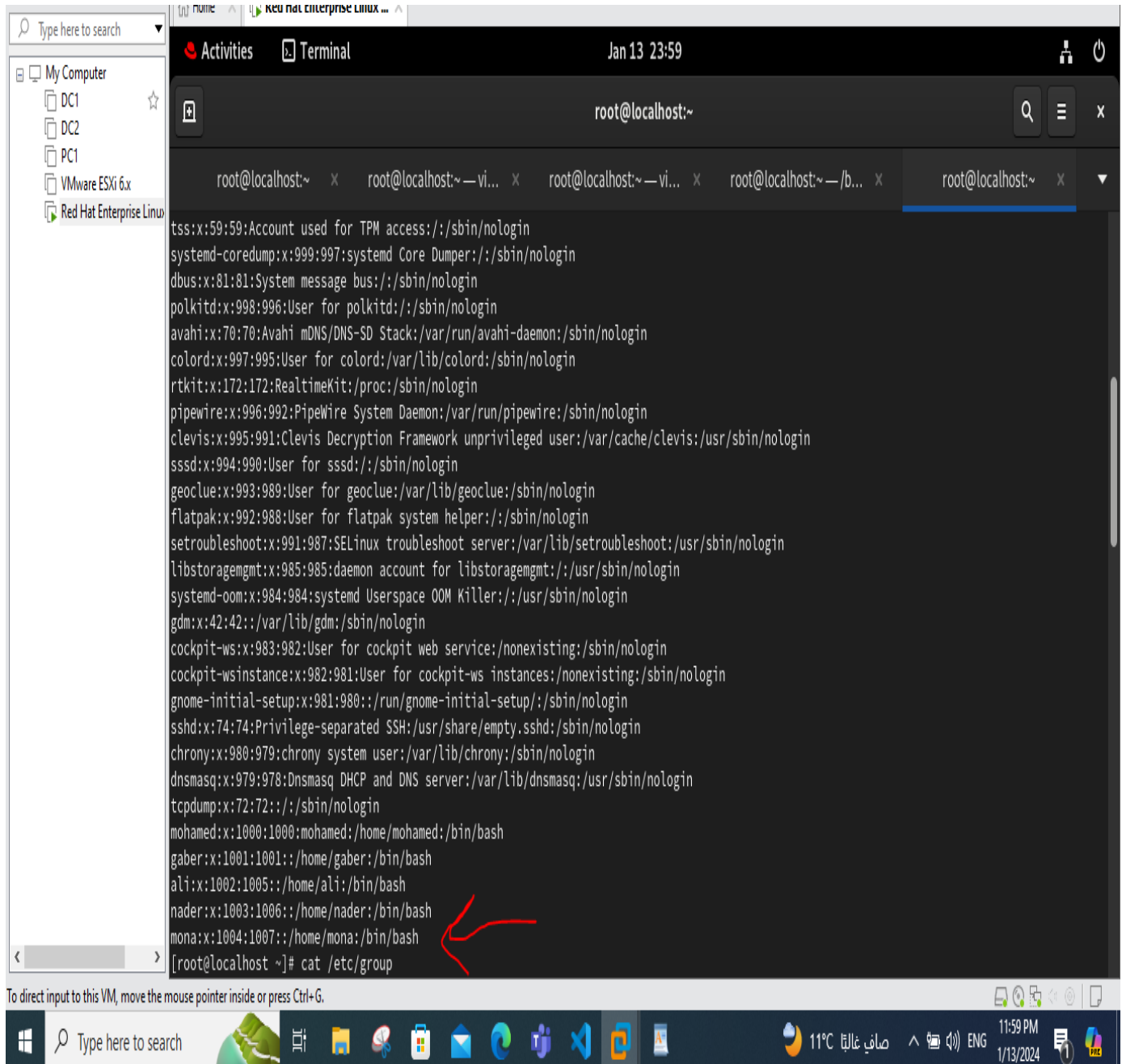
To direct input to this VM, move the mouse pointer inside or press Ctrl+G.

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By using cat /etc/passwd

To shw users added

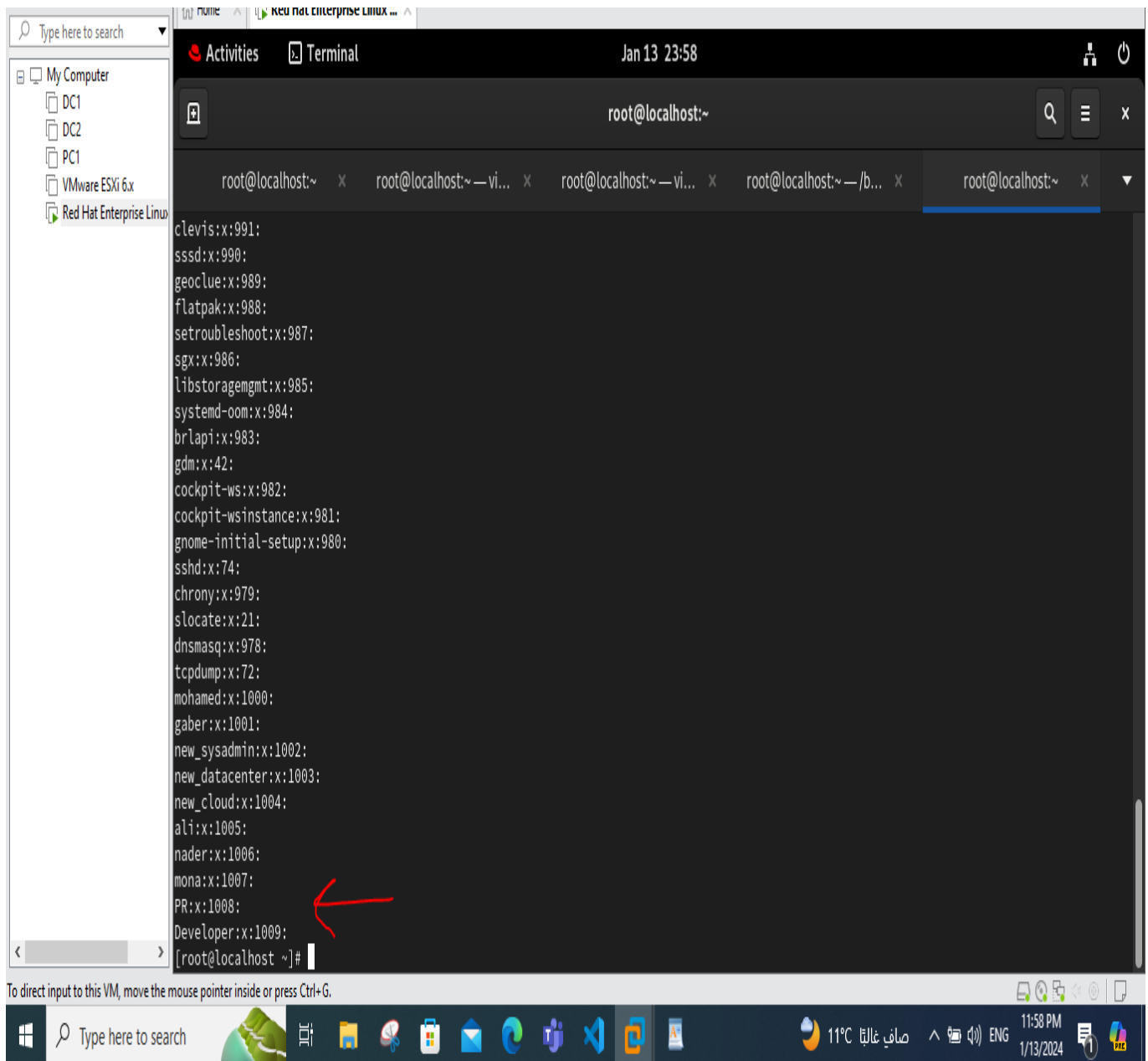


```
root@localhost:~  
tss:x:59:59:Account used for TPM access:/sbin/nologin  
systemd-coredump:x:999:997:systemd Core Dumper:/sbin/nologin  
dbus:x:81:81:System message bus:/sbin/nologin  
polkitd:x:998:996:User for polkitd:/sbin/nologin  
avahi:x:70:70:Avahi mDNS/DNS-SD Stack:/var/run/avahi-daemon:/sbin/nologin  
colord:x:997:995:User for colord:/var/lib/colord:/sbin/nologin  
rtkit:x:172:172:RealtimeKit:/proc:/sbin/nologin  
pipewire:x:996:992:PipeWire System Daemon:/var/run/pipewire:/sbin/nologin  
clevis:x:995:991:Clevis Decryption Framework unprivileged user:/var/cache/clevis:/usr/sbin/nologin  
sssd:x:994:990:User for sssd:/sbin/nologin  
geoclue:x:993:989:User for geoclue:/var/lib/geoclue:/sbin/nologin  
flatpak:x:992:988:User for flatpak system helper:/sbin/nologin  
setroubleshoot:x:991:987:SELinux troubleshoot server:/var/lib/setroubleshoot:/usr/sbin/nologin  
libstoragemgmt:x:985:985:daemon account for libstoragemgmt:/usr/sbin/nologin  
systemd-oom:x:984:984:systemd Userspace OOM Killer:/usr/sbin/nologin  
gdm:x:42:42:/var/lib/gdm:/sbin/nologin  
cockpit-ws:x:983:982:User for cockpit web service:/nonexisting:/sbin/nologin  
cockpit-wsinstance:x:982:981:User for cockpit-ws instances:/nonexisting:/sbin/nologin  
gnome-initial-setup:x:981:980:/run/gnome-initial-setup:/sbin/nologin  
sshd:x:74:74:Privilege-separated SSH:/usr/share/empty.sshd:/sbin/nologin  
chrony:x:980:979:chrony system user:/var/lib/chrony:/sbin/nologin  
dnsmasq:x:979:978:Dnsmasq DHCP and DNS server:/var/lib/dnsmasq:/usr/sbin/nologin  
tcpdump:x:72:72:/sbin/nologin  
mohamed:x:1000:1000:mohamed:/home/mohamed:/bin/bash  
gaber:x:1001:1001:/home/gaber:/bin/bash  
ali:x:1002:1005:/home/ali:/bin/bash  
nader:x:1003:1006:/home/nader:/bin/bash  
mona:x:1004:1007:/home/mona:/bin/bash  
[root@localhost ~]# cat /etc/group
```

To direct input to this VM, move the mouse pointer inside or press Ctrl+G.

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By use cat /etc/group



Thank you for your time I appreciate that