

Wed Apr 3 13:49:24 IST 2024

Main Menu

1. Create a user
2. Change the group for user
3. Create a group
4. Check password status
5. Change password
6. Lock user account
7. Unlock user account
8. Delete user
9. Exit

Please enter the number of your selection 1

Enter username to be created: deeksha

User deeksha created successfully

Press enter to continue █

Wed Apr 3 13:50:18 IST 2024

Main Menu

1. Create a user
2. Change the group for user
3. Create a group
4. Check password status
5. Change password
6. Lock user account
7. Unlock user account
8. Delete user
9. Exit

Please enter the number of your selection 2

NO SPECIAL CHARACTERS OR SPACES

Enter username: deeksh

Enter group name:Deekshita

usermod: group 'deeksh' does not exist

Group changed successfully for user deeksh

Press enter to continue █

Wed Apr 3 13:52:20 IST 2024

Main Menu

1. Create a user
2. Change the group for user
3. Create a group
4. Check password status
5. Change password
6. Lock user account
7. Unlock user account
8. Delete user
9. Exit

Please enter the number of your selection 3

Enter groupname to be created:navneet

Group already exists

Press enter to continue █

Wed Apr 3 13:53:00 IST 2024

Main Menu

1. Create a user
2. Change the group for user
3. Create a group
4. Check password status
5. Change password
6. Lock user account
7. Unlock user account
8. Delete user
9. Exit

Please enter the number of your selection 4

USE COMBINATION OF CAPITAL ,SMALL ,NUMBERS AND SPECIAL CHARACTERS TO CREATE A STRONG PASSWORD

Enter username to change password :Deekshita

Changing password for user Deekshita.

New password:

BAD PASSWORD: The password contains the user name in some form

Retype new password:

passwd: all authentication tokens updated successfully.

Press enter to continue █

Wed Apr 3 13:53:56 IST 2024

Main Menu

1. Create a user
2. Change the group for user
3. Create a group
4. Check password status
5. Change password
6. Lock user account
7. Unlock user account
8. Delete user
9. Exit

Please enter the number of your selection 5

Enter username: deekshita

Changing password for user deekshita.

New password:

BAD PASSWORD: The password is shorter than 8 characters

Retype new password:

passwd: all authentication tokens updated successfully.

Password for deekshita chnaged successfully

Press enter to continue █

Wed Apr 3 13:55:08 IST 2024

Main Menu

1. Create a user
2. Change the group for user
3. Create a group
4. Check password status
5. Change password
6. Lock user account
7. Unlock user account
8. Delete user
9. Exit

Please enter the number of your selection 6

Enter username to be locked :Deekshita

User Deekshita locked successfully

Press enter to continue

Wed Apr 3 13:55:33 IST 2024

Main Menu

1. Create a user
2. Change the group for user
3. Create a group
4. Check password status
5. Change password
6. Lock user account
7. Unlock user account
8. Delete user
9. Exit

Please enter the number of your selection 7

Enter username to be unlocked :Deekshita

User Deekshita unlocked successfully

Press enter to continue █

Wed Apr 3 14:01:02 IST 2024

Main Menu

1. Create a user
2. Change the group for user
3. Create a group
4. Check password status
5. Change password
6. Lock user account
7. Unlock user account
8. Delete user
9. Exit

Please enter the number of your selection 8

Enter username to be deleted: Deekshita

Are you sure you want to delete this user Deekshita and associated files (Y/N): y

User Deekshita deleted successfully

Press enter to continue █

Wed Apr 3 14:01:46 IST 2024

Main Menu

1. Create a user
2. Change the group for user
3. Create a group
4. Check password status
5. Change password
6. Lock user account
7. Unlock user account
8. Delete user
9. Exit

Please enter the number of your selection 9

Exiting the script

[root@deekshita donthuladeekshita]# █

```
#!/bin/bash
```

```
txtred=$(tput setaf 1)
txtgrn=$(tput setaf 2)
txtylw=$(tput setaf 3)
txtblu=$(tput setaf 4)
txtpur=$(tput setaf 5)
txtcyn=$(tput setaf 6)
txtrst=$(tput sgr0)
COLUMNS=$(tput cols)
```

```
center() {
w=$(( $COLUMNS / 2 - 20 ))
while IFS= read -r line
do
printf "%${w}s %s\n" ' ' "$line"
done
}
```

```
centerwide() {
w=$(( $COLUMNS / 2 - 30 ))
while IFS= read -r line
do
printf "%${w}s %s\n" ' ' "$line"
done
}
```

```
#Creating user
create_user(){
read -p "${txtblu} Enter username to be created: ${txtrst}" username
if id "$username" &>/dev/null;then
echo "${txtylw}User $username already exists ${txtrst}"|center
echo
else
useradd $username
echo "${txtgrn}User $username created successfully ${txtrst}"|center
fi
}
```

```
#changing group for user
change_group(){
echo "${txtred}NO SPECIAL CHARACTERS OR SPACES ${txtrst}"|center
read -p "Enter username: " username
read -p "Enter group name:" groupname
if id "$username" &>/dev/null; then
if grep -q "^$groupname:" /etc/group ; then
usermod -g $groupname $username
echo "${txtgrn}Group chnaged successfully for user $username ${txtrst}"|center
else
echo "${txtylw}Group $groupname does not exist ${txtrst}"|center

```

```

fi
else
usermod -g $username $groupname
echo "${txtgrn}Group changed successfully for user $username ${txtrst}"|center
fi
}

#Creating group
create_group(){
read -p "Enter groupname to be created:" groupname
if grep -q "^$groupname:" /etc/group ; then
echo "${txtylw}Group $ugroupname already exists ${txtrst}"|center
echo
else
groupadd $groupname
fi
}

#To check passwd status
check_passwd_status(){
echo "${txtylw}USE COMBINATION OF CAPITAL ,SMALL ,NUMBERS AND SPECIAL CHARACTERS TO
CREATE A STRONG PASSWORD ${txtrst}"|centerwide
read -p "Enter username to change password :" username
if id "$username" &>/dev/null;then
passwd $username
else
echo "${txtred}User $username does not exist ${txtrst}"|center
fi

}

#To change password
change_passwd(){
read -p " Enter username: " username
if id "$username" &>/dev/null;then
passwd $username
if [ $? -eq 0 ];then
echo "${txtgrn} Password for $username chnaged successfully ${txtrst}"
else
echo "${txtred} Failed to change password for $username ${txtrst}"
fi

passwd -S $username | grep -q "WEAK"
if [ $? -eq 0 ];then
echo " ${txtpur} Password fo $username is weak ${txtrst}"
fi

else
echo "User $username does not exist"
fi
}

```

```

#To lock user
lock_user(){
read -p "Enter username to be locked :" username
usermod -L $username
echo "${txtgrn} User $username locked successfully ${txtrst} "|center
}
#To Unlock user
unlock_user(){
read -p "Enter username to be unlocked :" username
usermod -U $username
echo "${txtgrn}User $username unlocked successfully ${txtrst} "|center
}
#To Delete user
delete_user() {
    read -p "Enter username to be deleted: " username
    if id "$username" &>/dev/null; then
        read -p "Are you sure you want to delete this user $username and associated
files (Y/N): " confirm
        if [[ "$confirm" == "Y" || "$confirm" == "y" ]]; then
            sudo userdel -r "$username"
            echo "User $username deleted successfully"
        else
            echo "Deletion cancelled"
        fi
    else
        echo "User $username does not exist"
    fi
}

Exit() {
    echo "Exiting the script"
    exit 0
}
# Purpose - Display a menu on screen
while :
do

clear
date
echo "-----"|center
echo "          Main Menu "| center
echo "-----"|center
echo "${txtcyn}1. Create a user${txtcyn}"| center
echo "${txtcyn}2. Change the group for user${txtcyn}"| center
echo "${txtcyn}3. Create a group${txtcyn}"| center
echo "${txtcyn}4. Check password status${txtcyn}"| center
echo "${txtcyn}5. Change password${txtcyn}"| center
echo "${txtcyn}6. Lock user account${txtcyn}"| center
echo "${txtcyn}7. Unlock user account${txtcyn}"| center

```

```
echo "${txtcyn}8. Delete user${txtcyn}" | center
echo "${txtred}9. Exit ${txtred}" | center
read -p "${txtgrn} Please enter the number of your selection ${txtrst}" choice

case $choice in
1)create_user;;
2)change_group;;
3)create_group;;
4)check_passwd_status;;
5)change_passwd;;
6)lock_user;;
7)unlock_user;;
8)delete_user;;
9)Exit;;
*)echo "Invalid choice:Please select a valid option...";;
esac

read -p "${txtrst}Press enter to continue ${txtrst}"

done
```

Package Management Menu

1. yum commands/options
2. Available packages
3. Installed packages
4. Package Information
5. Find package
6. Check yum history
7. Install package
8. Update package
9. Upgrade package
10. Clean cache
11. Exit

Enter your choice: 2

Loaded plugins: fastestmirror, langpacks

Loading mirror speeds from cached hostfile

* base: mirrors.nxtgen.com

* extras: mirrors.nxtgen.com

* updates: mirrors.nxtgen.com

Available Packages

389-ds-base.x86_64	1.3.11.1-4.el7_9	updates
389-ds-base-devel.x86_64	1.3.11.1-4.el7_9	updates
389-ds-base-libs.x86_64	1.3.11.1-4.el7_9	updates

donthuladeekshita@deekshita:~

File Edit View Search Terminal Help

yum(8)

yum(8)

NAME

yum - Yellowdog Updater Modified

SYNOPSIS

yum [options] command [package ...]

DESCRIPTION

yum is an interactive, rpm based, package manager. It can automatically perform system updates, including dependency analysis and obsolete processing based on "repository" metadata. It can also perform installation of new packages, removal of old packages and perform queries on the installed and/or available packages among many other commands/services (see below). **yum** is similar to other high level package managers like apt-get and smart.

While there are some graphical interfaces directly to the **yum** code, more recent graphical interface development is happening with PackageKit and the gnome-packagekit application.

command is one of:

- * install package1 [package2] [...]
- * update [package1] [package2] [...]
- * update-to [package1] [package2] [...]

Manual page yum(8) line 1 (press h for help or q to quit)

donthuladeekshita@deekshita:/home/donthuladeekshita

File Edit View Search Terminal Help

[root@deekshita donthuladeekshita]# bash exp7b

Package Management Menu

1. yum commands/options
2. Available packages
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6. Check yum history
7. Install package
8. Update package
9. Upgrade package
10. Clean cache
11. Exit

Enter your choice: 3

Enter package name: tree

Package 'tree' is already installed.

donthuladeekshita@deekshita:~

File Edit View Search Terminal Help

```

yum-plugin-rpm-warm-cache.noarch      1.1.31-54.el7_8      base
yum-plugin-show-leaves.noarch         1.1.31-54.el7_8      base
yum-plugin-tmprepo.noarch             1.1.31-54.el7_8      base
yum-plugin-tsflags.noarch             1.1.31-54.el7_8      base
yum-plugin-upgrade-helper.noarch      1.1.31-54.el7_8      base
yum-plugin-verify.noarch              1.1.31-54.el7_8      base
yum-plugin-versionlock.noarch         1.1.31-54.el7_8      base
yum-rhn-plugin.noarch                 2.0.1-10.el7          base
yum-updateonboot.noarch               1.1.31-54.el7_8      base
zenity.x86_64                         3.28.1-2.el7_9        updates
zlib.i686                             1.2.7-21.el7_9         updates
zlib.x86_64                           1.2.7-21.el7_9         updates
zlib-devel.i686                       1.2.7-21.el7_9         updates
zlib-devel.x86_64                     1.2.7-21.el7_9         updates
zlib-static.i686                      1.2.7-21.el7_9         updates
zlib-static.x86_64                    1.2.7-21.el7_9         updates
zsh.x86_64                            5.0.2-34.el7_8.2       base
zsh-html.x86_64                       5.0.2-34.el7_8.2       base
zziplib.i686                          0.13.62-12.el7         base
zziplib.x86_64                        0.13.62-12.el7         base
zziplib-devel.i686                    0.13.62-12.el7         base
zziplib-devel.x86_64                  0.13.62-12.el7         base
zziplib-utils.x86_64                  0.13.62-12.el7         base

```

Packages displayed successfully.

Package Management Menu

1. yum commands/options
2. Available packages
3. Installed packages
4. Package Information
5. Find package
6. Check yum history
7. Install package
8. Update package
9. Upgrade package
10. Clean cache
11. Exit

Enter your choice: 4

Available packages:

Loaded

Loading

*

*

*

Available

PackageKit.i686

aether-javadoc.noarch

File Edit View Search Terminal Help

```

yum-plugin-show-leaves.noarch
yum-plugin-tmprepo.noarch
yum-plugin-tsflags.noarch
yum-plugin-upgrade-helper.noarch
yum-plugin-verify.noarch
yum-plugin-versionlock.noarch
yum-rhn-plugin.noarch
yum-updateonboot.noarch
zenity.x86_64
zlib-devel.i686
zlib-static.i686
zlib-static.x86_64
zsh.x86_64
zsh-html.x86_64
zziplib.i686
zziplib-devel.i686
zziplib-devel.x86_64
zziplib-utils.x86_64

```

Attempting to install packages...

Enter package name: tree

Package 'tree' is already installed.

File Edit View Search Terminal Help

```
yum-plugin-tmprepo.noarch
yum-plugin-tsflags.noarch
yum-plugin-upgrade-helper.noarch
yum-plugin-verify.noarch
yum-plugin-versionlock.noarch
yum-rhn-plugin.noarch
yum-updateonboot.noarch
zenity.x86_64
zlib-devel.i686
zlib-static.i686
zlib-static.x86_64
zsh.x86_64
zsh-html.x86_64
zziplib.i686
zziplib-devel.i686
zziplib-devel.x86_64
zziplib-utils.x86_64
```

Attempting to install packages...

Enter package name: git

Package 'git' is not installed. Do you want to install it? (y/n): y

Package 'git' installed successfully.

Package Management Menu

1. yum commands/options
2. Available packages
3. Installed packages
4. Package Information
5. Find package
6. Check yum history
7. Install package
8. Update package
9. Upgrade package
10. Clean cache
11. Exit

Enter your choice: 5

Enter search keyword: tree

Package found successfully

donthuladeekshita@deekshita:/home/donthuladeekshita

File Edit View Search Terminal Help

Package Management Menu

1. yum commands/options
2. Available packages
3. Installed packages
4. Package Information
5. Find package
6. Check yum history
7. Install package
8. Update package
9. Upgrade package
10. Clean cache
11. Exit

Enter your choice: 6

Loaded plugins: fastestmirror, langpacks, refresh-packagekit

ID	Command line	Date and time	Action(s)	Altered
113	install -y aether.noarch	2024-04-03 12:30	I, U	87 EE
112	install -y adwaita-qt5.i	2024-04-03 12:30	I, U	13
111	install -y adwaita-qt4.i	2024-04-03 12:30	Install	1
110	install -y adwaita-qt-co	2024-04-03 12:30	Install	1
109	install -y adwaita-qt.x8	2024-04-03 12:30	Install	2
108	install -y adwaita-icon-	2024-04-03 12:30	Install	1
107	install -y adwaita-gtk2-	2024-04-03 12:30	Install	1
106	install -y advancecomp.x	2024-04-03 12:30	Install	1

```
donthuladeekshita@deekshita:/home/donthuladeekshita
File Edit View Search Terminal Help
ID | Command line | Date and time | Action(s) | Altered
---|---|---|---|---
113 | install -y aether.noarch | 2024-04-03 12:30 | I, U | 87 EE
112 | install -y adwaita-qt5.i | 2024-04-03 12:30 | I, U | 13
111 | install -y adwaita-qt4.i | 2024-04-03 12:30 | Install | 1
110 | install -y adwaita-qt-co | 2024-04-03 12:30 | Install | 1
109 | install -y adwaita-qt.x8 | 2024-04-03 12:30 | Install | 2
108 | install -y adwaita-icon- | 2024-04-03 12:30 | Install | 1
107 | install -y adwaita-gtk2- | 2024-04-03 12:30 | Install | 1
106 | install -y advancecomp.x | 2024-04-03 12:30 | Install | 1
105 | install -y adobe-mapping | 2024-04-03 12:29 | Install | 1
104 | install -y adobe-mapping | 2024-04-03 12:29 | Install | 1
103 | install -y adcli.x86_64 | 2024-04-03 12:29 | Install | 1
102 | install -y acpid-sysvini | 2024-04-03 12:29 | Install | 1
101 | install -y acpid.x86_64 | 2024-04-03 12:28 | Install | 1
100 | install -y acpica-tools. | 2024-04-03 12:28 | Install | 1
99 | install -y accountsservi | 2024-04-03 12:28 | Install | 1
98 | install -y accountsservi | 2024-04-03 12:28 | Install | 2
97 | install -y abrt-python-d | 2024-04-03 12:28 | Install | 1
96 | install -y abrt-java-con | 2024-04-03 12:28 | Install | 1
95 | install -y abrt-gui-deve | 2024-04-03 12:28 | Install | 1
94 | install -y abrt-gui-deve | 2024-04-03 12:27 | Install | 2

history list
Yum history displayed successfully.
-----
Package Management Menu
-----
1. yum commands/options
2. Available packages
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5. Find package
6. Check yum history
7. Install package
8. Update package
9. Upgrade package
10. Clean cache
11. Exit

Enter your choice: 7
Enter package name to install: tree
Are you sure you want to install the package 'tree'? (y/n): y
Loaded plugins: fastestmirror, langpacks
Loading mirror speeds from cached hostfile
* base: mirrors.hostever.com
* extras: mirrors.hostever.com
* updates: mirrors.hostever.com
Package tree-1.6.0-10.el7.x86_64 already installed and latest version
Nothing to do
Package 'tree' installed successfully.
-----
Package Management Menu
-----
1. yum commands/options
2. Available packages
3. Installed packages
4. Package Information
5. Find package
6. Check yum history
7. Install package
8. Update package
9. Upgrade package
10. Clean cache
11. Exit

Enter your choice: 8
Are you sure you want to update all packages? (y/n): y
Loaded plugins: fastestmirror, langpacks, refresh-packagekit
Loading mirror speeds from cached hostfile
* base: mirrors.hostever.com
* extras: mirrors.hostever.com
* updates: mirrors.hostever.com
Resolving Dependencies
There are unfinished transactions remaining. You might consider running yum-complete-tr
ansaction, or "yum-complete-transaction --cleanup-only" and "yum history redo last". fi
```

```
File Edit View Search Terminal Help
Updating : libibverbs-22.4-6.el7_9.x86_64 11/401
Updating : librdmacm-22.4-6.el7_9.x86_64 12/401
Updating : brasero-3.12.2-5.el7_9.1.x86_64 13/401
Updating : ndctl-libs-65-6.el7_9.x86_64 14/401
Updating : xmlsec1-openssl-1.2.20-8.el7_9.x86_64 15/401
Updating : open-vm-tools-11.0.5-3.el7_9.9.x86_64 16/401
Updating : 32:bind-libs-9.11.4-26.P2.el7_9.15.x86_64 17/401
Updating : flatpak-libs-1.0.9-12.el7_9.x86_64 18/401
Updating : flatpak-1.0.9-12.el7_9.x86_64 19/401
Updating : cronie-1.4.11-25.el7_9.x86_64 20/401
Updating : cronie-anacron-1.4.11-25.el7_9.x86_64 21/401
Updating : ibus-gtk2-1.5.17-14.el7_9.x86_64 22/401
Updating : ibus-gtk3-1.5.17-14.el7_9.x86_64 23/401
Updating : ibus-1.5.17-14.el7_9.x86_64 24/401
Updating : ibus-setup-1.5.17-14.el7_9.noarch 25/401
Updating : kbd-misc-1.15.5-16.el7_9.noarch 26/401
Updating : mesa-filesystem-18.3.4-12.el7_9.x86_64 27/401
Updating : mesa-dri-drivers-18.3.4-12.el7_9.x86_64 28/401
Updating : glusterfs-cli-6.0-61.el7.x86_64 29/401
Updating : device-mapper-persistent-data-0.8.5-3.el7_9.2.x86_64 30/401
Updating : linux-firmware-20200421-82.git [#####] 31/401^
Updating : linux-firmware-20200421-82.git [#####] 31/401^
Updating : linux-firmware-20200421-82.git78c0348.el7_9.noarch 31/401
^C^C^C
Failed to update packages. Please try again later.
[root@deekshita donthuladeekshita]# ^C
[root@deekshita donthuladeekshita]# ^C
```

Package Management Menu

- 1. yum commands/options
- 2. Available packages
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- 5. Find package
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- 7. Install package
- 8. Update package
- 9. Upgrade package
- 10. Clean cache
- 11. Exit

Enter your choice: 9
Are you sure you want to upgrade all packages? (y/n): y
Loaded plugins: fastestmirror, langpacks, refresh-packagekit
Loading mirror speeds from cached hostfile
* base: mirrors.hostever.com
* extras: mirrors.hostever.com
* updates: mirrors.hostever.com
Resolving Dependencies
There are unfinished transactions remaining. You might consider running yum-complete-tr
ansaction. or "yum-complete-transaction --cleanup-only" and "yum history redo last". fi

File	Edit	View	Search	Terminal	Help				
vim-minimal						x86_64	2:7.4.629-8.el7_9	updates	443 K
virt-what						x86_64	1.18-4.el7_9.1	updates	30 k
webkitgtk4						x86_64	2.28.2-3.el7	updates	28 M
webkitgtk4-jsc						x86_64	2.28.2-3.el7	updates	5.7 M
wpa_supplicant						x86_64	1:2.6-12.el7_9.2	updates	1.2 M
xfsdump						x86_64	3.1.7-4.el7_9	updates	309 k
xorg-x11-drv-ati						x86_64	19.0.1-3.el7_7	updates	166 k
xorg-x11-server-Xorg						x86_64	1.20.4-27.el7_9	updates	1.5 M
xorg-x11-server-common						x86_64	1.20.4-27.el7_9	updates	58 k
zenity						x86_64	3.28.1-2.el7_9	updates	4.0 M

Transaction Summary

=====

Install 1 Package
Upgrade 169 Packages

Total size: 340 M
Downloading packages:
Running transaction check
Running transaction test

Transaction check error:

file /usr/share/man/man8/gluster.8.gz from install of glusterfs-6.0-61.el7.x86_64 con
flicts with file from package glusterfs-cli-6.0-37.el7.x86_64

Package Management Menu

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9. Upgrade package
10. Clean cache
11. Exit

Enter your choice: 10

Are you sure you want to clean the cache? This action cannot be undone. (y/n): y

Loaded plugins: fastestmirror, langpacks

Cleaning repos: base extras updates

Cleaning up list of fastest mirrors

Other repos take up 1.2 G of disk space (use --verbose for details)

Cache cleaned successfully

Package Management Menu

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5. Find package
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7. Install package
8. Update package
9. Upgrade package
10. Clean cache
11. Exit

Enter your choice: 11

Exiting the script

[donthuladeekshita@deekshita ~]\$

```

#!/bin/bash
bold=$(tput bold)
txtred=$(tput setaf 1)
txtgrn=$(tput setaf 2)
txtylw=$(tput setaf 3)
txtblu=$(tput setaf 4)
txtpur=$(tput setaf 5)
txtcyn=$(tput setaf 6)
txtrst=$(tput sgr0)
COLUMNS=$(tput cols)

center() {
    w=$(( $COLUMNS / 2 - 20 ))
    while IFS= read -r line
    do
        printf "%${w}s %s\n" ' ' "$line"
    done
}

centerwide() {
    w=$(( $COLUMNS / 2 - 30 ))
    while IFS= read -r line
    do
        printf "%${w}s %s\n" ' ' "$line"
    done
}

# Function to display yum commands/options
function display_yum_commands() {
    #yum help
    if man yum &>/dev/null; then
        man yum
        echo "${txtgrn}Command displayed successfully.${txtrst}"|center
    else
        echo "${txtred}Cannot display yum commands.${txtrst}"|center
    fi
}

# Function to display available packages
function display_available_packages() {
    # yum list available
    if packages=$(yum list available); then
        echo "$packages"
        echo "${txtgrn}Packages displayed successfully.${txtrst}"|center
    else
        echo "${txtred}Failed to display packages.${txtrst}"|center
    fi
}

# Function to display installed packages

```

```

function display_installed_packages() {
    read -p "Enter package name: " package
    if yum list installed "$package" &>/dev/null; then
        echo "${txtgrn}Package '$package' is already installed.${txtrst}" | center
    else
        read -p "Package '$package' is not installed. Do you want to install it?
(y/n): " confirm
        if [[ $confirm == "y" || $confirm == "Y" ]]; then
            if yum install -y "$package" &>/dev/null; then
                echo "${txtgrn}Package '$package' installed successfully.${txtrst}"
| center
            else
                echo "${txtred}Failed to install package '$package'.${txtrst}" |
center
            fi
        else
            echo "${txtylw}Package installation cancelled.${txtrst}" | center
        fi
    fi
}

```

Function to display package information

```

function display_package_info() {
    #yum list available
    packages=$(yum list available | awk '{print $1}')
    if [[ -n "$packages" ]]; then
        echo "Available packages:"
        echo "$packages"
        echo "-----"
        echo "Attempting to install packages..."
        echo "-----"
        success_count=0
        failed_count=0
        for package in $packages; do
            display_installed_packages "$package"
            if yum list installed "$package" &>/dev/null; then
                ((success_count++))
            else
                ((failed_count++))
            fi
        done
        echo "-----"
        echo "Installation summary:"
        echo "${txtgrn}Successful installations: $success_count
${txtrst}"|centerwide
        echo "${txtred}Failed installations: $failed_count ${txtrst}"|center
    else
        echo "${txtred}No available packages found.${txtrst}"|center
    fi
}

```

```

}

# Function to find a package
function find_package() {
    read -p "${txtylw}Enter search keyword: ${txtrst}" keyword|center
    if search_result=$(yum search all "$keyword")|center;then
    echo "${txtgrn}Package found successfully${txtrst}"|center
    else
    echo "${txtred}Package not found${txtrst}"|center
    fi
    # echo "Search result: $search_result" # Debug statement
}

# Function to check yum history
function check_yum_history() {
    if history=$(yum history); then
        echo "$history"
        echo "${txtgrn}Yum history displayed successfully.${txtrst}"|center
    else
        echo "${txtred}Failed to display yum history. ${txtrst}"|center
    fi
}

# Function to install a package
function install_package() {
    read -p "${txtylw}Enter package name to install: ${txtrst}" package
    read -p "${txtblu}Are you sure you want to install the package '$package'?
(y/n): ${txtrst} " confirm
    if [[ $confirm == "y" || $confirm == "Y" ]]; then
        if yum install -y "$package"; then
            echo "${txtgrn}Package '$package' installed successfully.
${txtrst}"|center
        else
            echo "${txtred}Failed to install package '$package'.${txtrst}"|center
        fi
    else
        echo "${txtred}Installation cancelled.${txtrst}"|center
    fi
}

# Function to update packages
function update_packages() {
    read -p "${txtylw}Are you sure you want to update all packages? (y/n):
${txtrst}" confirm
    if [[ $confirm == "y" || $confirm == "Y" ]]; then
        if yum update -y; then
            echo "${txtgrn}Packages updated successfully.${txtrst}" | center
        else
            echo "${txtred}Failed to update packages. Please try again

```



```

later.${txtrst}" | center
    fi
    else
        echo "${txtred}Update cancelled.${txtrst}" | center
    fi
}

# Function to upgrade packages
function upgrade_packages() {
    read -p "${txtylw}Are you sure you want to upgrade all packages? (y/n):
${txtrst}" confirm
    if [[ $confirm == "y" || $confirm == "Y" ]]; then
        if yum upgrade -y; then
            echo "${txtgrn}Packages upgraded successfully.${txtrst}" | center
        else
            echo "${txtred}Failed to upgrade packages. Please try again
later.${txtrst}" | center
        fi
    else
        echo "${txtred}Upgrade cancelled.${txtrst}" | center
    fi
}

# Function to clean cache
function clean_cache() {
    read -p "${txtred}Are you sure you want to clean the cache? This action cannot
be undone. (y/n): ${txtrst}" confirm
    if [[ $confirm == "y" || $confirm == "Y" ]]; then
        if yum clean all; then
            echo "${txtgrn}Cache cleaned successfully${txtrst}"
        else
            echo "${txtred}Failed to clean the cache. Please try again
later.${txtrst}"|center
        fi
    else
        echo "${txtred}Cache cleaning cancelled.${txtrst}"|center
    fi
}

function Exit() {
    echo "${txtgrn}Exiting the script ${txtrst}"|center
    exit 0
}

# Main menu
echo
"${txtylw}-----

```

```

-----${txtrst}"
echo "                ${bold} ${txtgrn}Package Management Menu ${txtrst}"|centerwide
echo
"${txtylw}-----
-----${txtrst}"
echo "${txtblu}1. yum commands/options"|center
echo "2. Available packages"|center
echo "3. Installed packages"|center
echo "4. Package Information"|center
echo "5. Find package"|center
echo "6. Check yum history"|center
echo "7. Install package"|center
echo "8. Update package"|center
echo "9. Upgrade package"|center
echo "10. Clean cache ${txtrst}"|center
echo "${txtred}11. Exit ${txtrst}"|center

read -p "Enter your choice: " choice

# Switch condition to execute based on user's choice
case $choice in
    "1") display_yum_commands ;;
    "2") display_available_packages ;;
    "3") display_installed_packages ;;
    "4") display_package_info ;;
    "5") find_package ;;
    "6") check_yum_history ;;
    "7") install_package ;;
    "8") update_packages ;;
    "9") upgrade_packages ;;
    "10") clean_cache ;;
    "11") Exit;;
    *)
        echo "${txtred}Invalid option. Please try again... ${txtrst}"|center
        ;;
esac

```