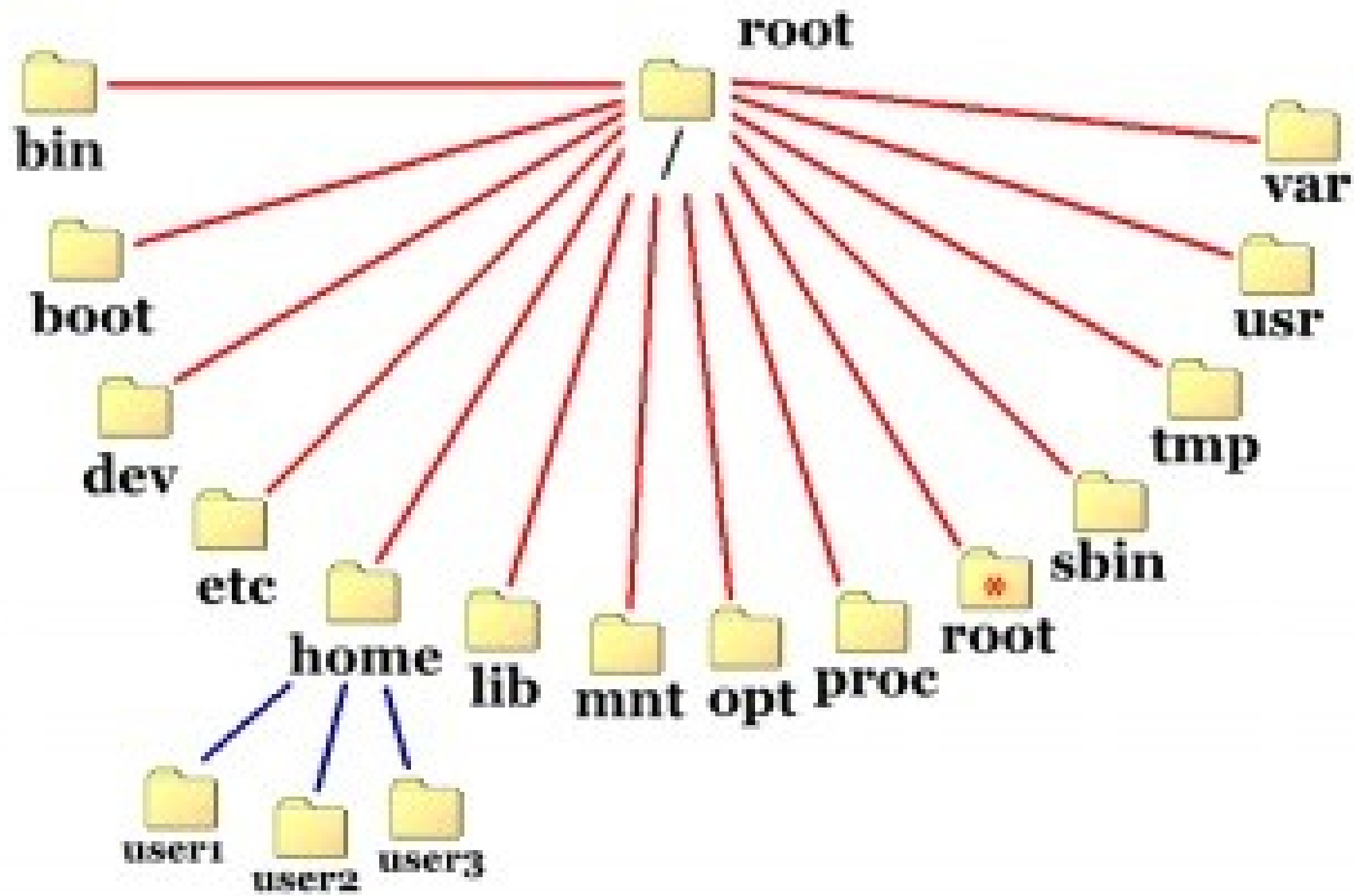


This slides for every one who want to learn Linux
in our **Arab World** and the **whole World**..
Thanks for every one who **sharing** us his experience
and **help us** to learn linux ..
:)

Linux File System



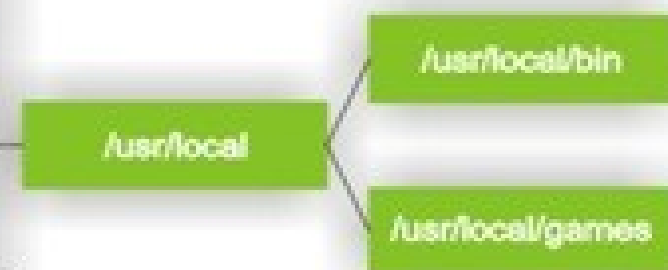


**ROOT DIRECTORY
OF THE ENTIRE
FILE SYSTEM
HIERARCHY**
/
PRIMARY HIERARCHY

/bin/	ESSENTIAL USER COMMAND BINARIES
/boot/	STATIC FILES OF THE BOOT LOADER
/dev/	DEVICE FILES
/etc/	HOST-SPECIFIC SYSTEM CONFIGURATION <small>REQUIRED DIRECTORIES: OPT, X11, X86ML, XMAN</small>
/home/	USER HOME DIRECTORIES
/lib/	ESSENTIAL SHARED LIBRARIES AND KERNEL MODULES
/media/	MOUNT POINT FOR REMOVABLE MEDIA
/mnt/	MOUNT POINT FOR A TEMPORARILY MOUNTED FILESYSTEMS
/opt/	ADD-ON APPLICATION SOFTWARE PACKAGES
/sbin/	SYSTEM BINARIES
/srv/	DATA FOR SERVICES PROVIDED BY THIS SYSTEM
/tmp/	TEMPORARY FILES
/usr/	(MULTI-)USER UTILITIES AND APPLICATIONS <small>SECONDARY HIERARCHY REQUIRED DIRECTORIES: BIN, INCLUDE, LIB, LOCAL, SRM, SHARE</small>
/var/	VARIABLE FILES
/root/	HOME DIRECTORY FOR THE ROOT USER
/proc/	VIRTUAL FILESYSTEM DOCUMENTING KERNEL AND PROCESS STATUS AS TEXT FILES



FILESYSTEM HIERARCHY STANDARD (FHS)



LINUXCONF.ORG



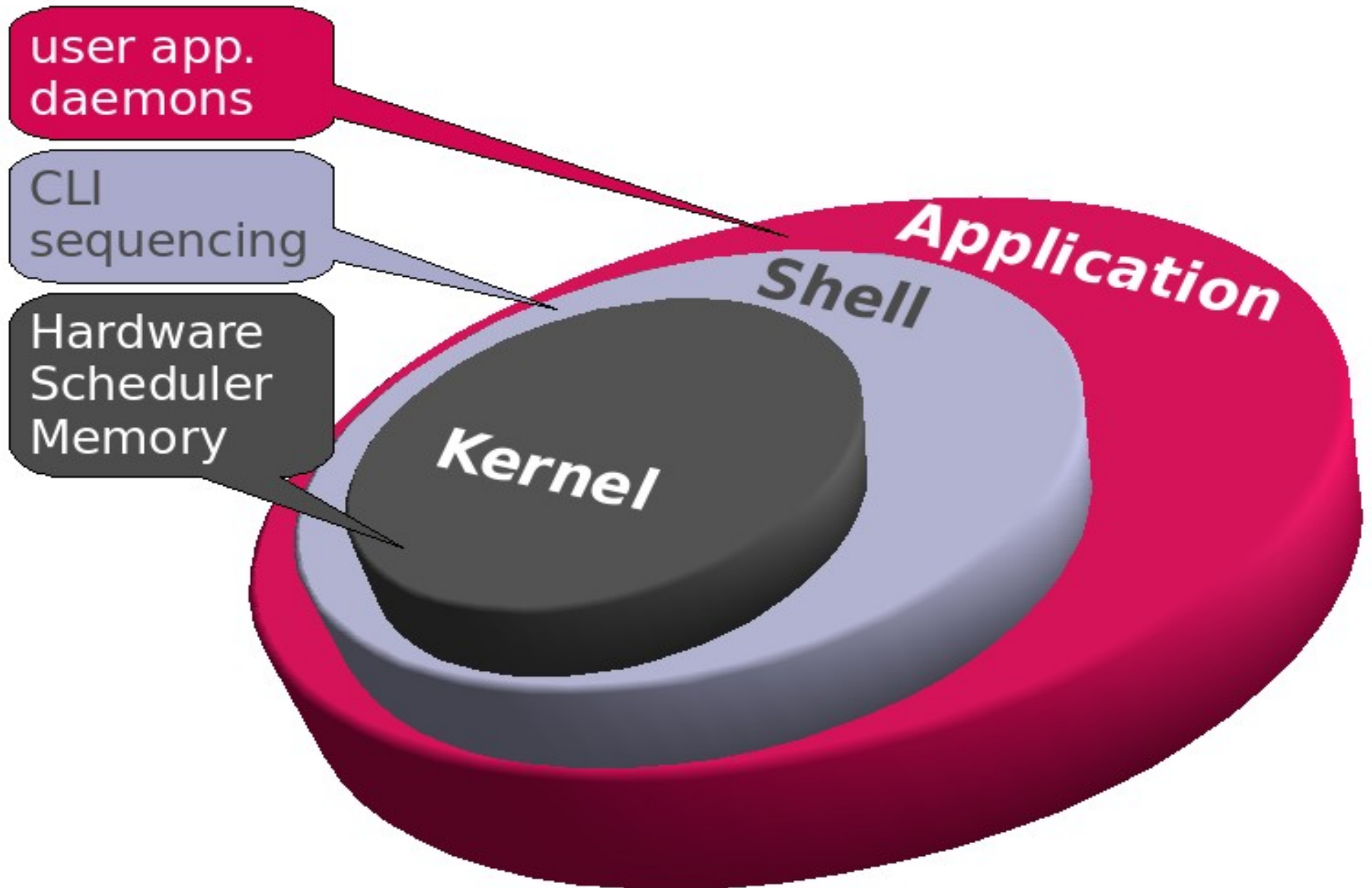
1. Open terminal:

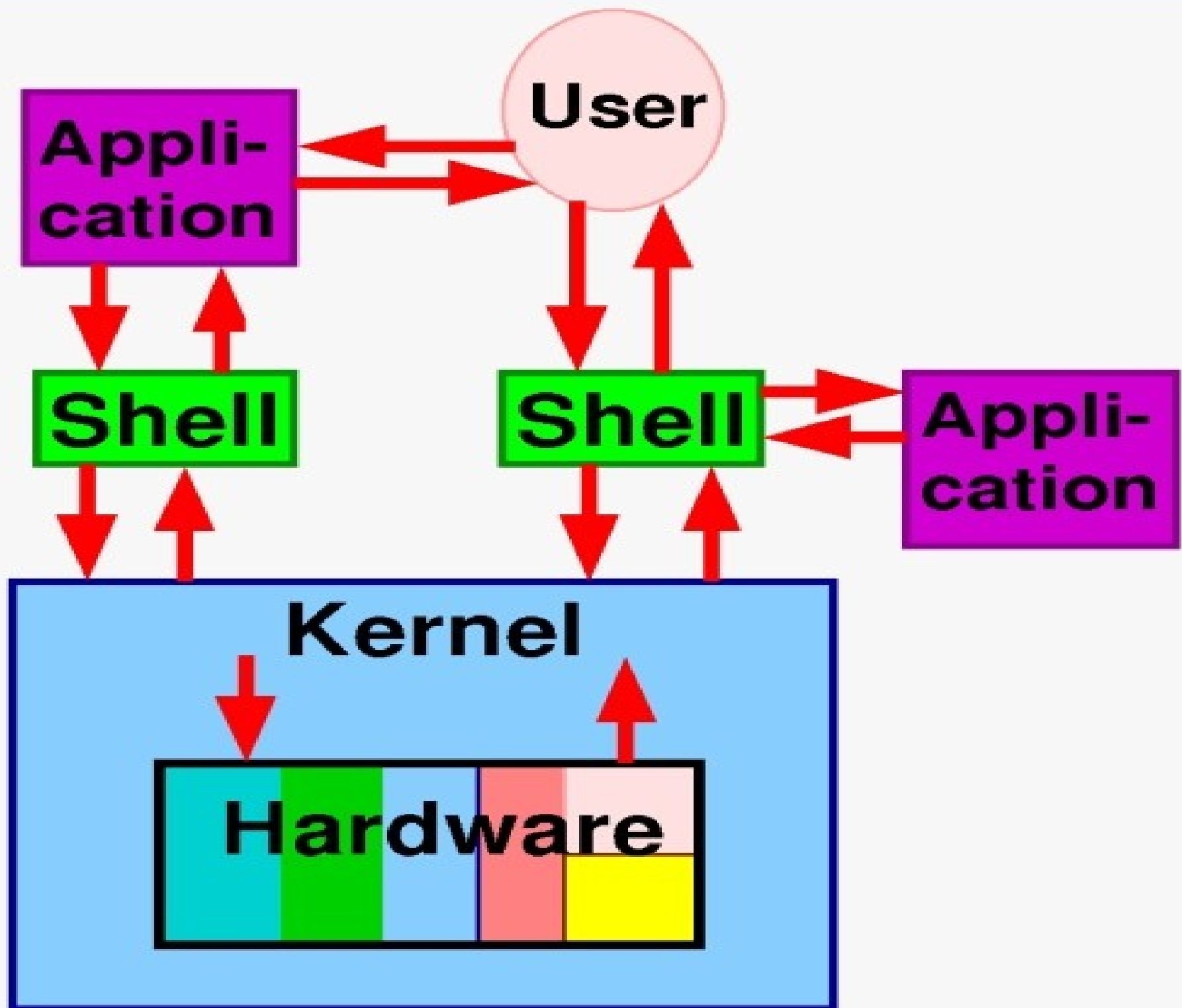


2. Type:

man hier

How Linux is Organized??!





Cli : Command Line interface..

SYSTEMS

sudo reboot - reboot system as root
 sudo rm -rf /var - delete /var
 sudo rm -rf /usr - delete /usr as root
 sudo % - delete sudo password
 sudo command - execute with using (sudo)
 sudo command - execute with using (sudo)
 sudo rm -rf /usr - delete /usr
 sudo rm -rf /usr - delete /usr
 sudo rm -rf /usr - delete /usr
 sudo rm -rf /usr - delete /usr

DISPLAY

sudo systemctl stop display - stop & and remove the display (systemd)
 sudo systemctl start display - start & and remove the display (systemd)
 sudo systemctl stop - stop
 sudo systemctl start - start
 sudo systemctl stop - stop
 sudo systemctl start - start
 sudo systemctl stop - stop
 sudo systemctl start - start



SYSTEM SERVICES

systemctl start - start the service (systemd)
 systemctl stop - stop the service (systemd)
 systemctl restart - restart the service (systemd)
 systemctl status - status the service (systemd)
 systemctl enable - enable the service (systemd)
 systemctl disable - disable the service (systemd)
 systemctl restart - restart the service (systemd)
 systemctl status - status the service (systemd)

APPLICATIONS

systemctl - stop service (systemd)
 systemctl - stop service (systemd)
 systemctl - stop service (systemd)
 systemctl - stop service (systemd)
 systemctl - stop service (systemd)

SYSTEM

systemctl - stop service (systemd)
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 systemctl - stop service (systemd)



1. Open terminal:



2. Type:

`cat /etc/shells`

Ubuntu default SHELL

*What is MyShell:
\$ echo \$SHELL

* Change Shell:
\$ chsh



\$ command -options parameter

Linux



`user @ computer-name:~ $`



whoami
hostname

user

computer-name



user @ computer-name:~ \$



User Home Folder



pwd



/home/user1

Magic command

Sudo : Super User Do



sudo su



sudo -i

MAKE ME A SANDWICH.



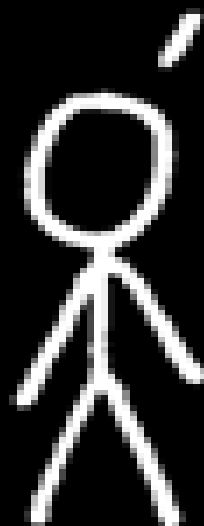
SUDO MAKE ME
A SANDWICH.



WHAT? MAKE
IT YOURSELF.



OKAY.



Switch user : su



```
su user-name
```

Change user password



```
passwd
```


Users logs

-Who logged in:

\$ Who or w

-Last Sessions:

\$ last

Change Directory: cd



cd



cd .

cd ..



cd ~



cd /



cd Desktop/

List Files: ls



ls



ls -a



ls directory



ls -l file|dir



man ls

Get
manual

ubuntu

Create Directory : mkdir



```
mkdir UBUNTU
```

Remove Directory : rmdir



```
rmdir UBUNTU
```

Create File



touch <file1> <file2> <....>



cat > file-name

→ **new**



cat >> file-name

→ **update**

Read File



```
cat path/file-name
```

Remove File



```
rm path/file-name
```

You can also do stuff like `rm b*` with the **asterisk**. For removing a collections of files started with litter **b**.

Reading Files



head -# file-name



tail -# file-name



less path/file-name



more path/file-name



gedit path/file-name

Text Search : grep

g/re/p (global / regular expression / print).



grep -i pattern file-name

ignore case



grep -v pattern file-name

all except patt



grep -w pattern file-name

as 1 word

*.txt

/directory

Continued....

- **whereis ls** : Display information about the location of a command
- **which ls** : Display which version of a command will execute .
- **pwd**: print working directory

Try...

- Try
man -f ls
whatis ls
- Try
man -k ls
apropos ls

Reboot



```
sudo reboot
```

ShutDown



```
sudo shutdown time
```



```
sudo shutdown -r NOW
```



```
sudo shutdown -c time
```

Copy Paste : cp



```
cp <file1> <file2> <dest>
```



```
cp -r dir/* new-directory
```

Move + Rename : mv



```
mv path/file new-path/new-name
```



```
mv -r dir/* new-directory
```



Terminal

File Edit View Terminal Help

User @ computer-name:~\$ mkdir UBUNTU

User @ computer-name:~\$





Terminal

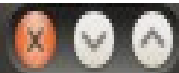
File Edit View Terminal Help

User @ computer-name:~\$ ls

Desktop	examples.desktop	Public	Videos
Documents	Music	Templates	
Downloads	Pictures	UBUNTU	

User @ computer-name:~\$



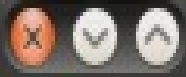


Terminal

File Edit View Terminal Help

User@computer-name:~\$ cd UBUNTU





Terminal

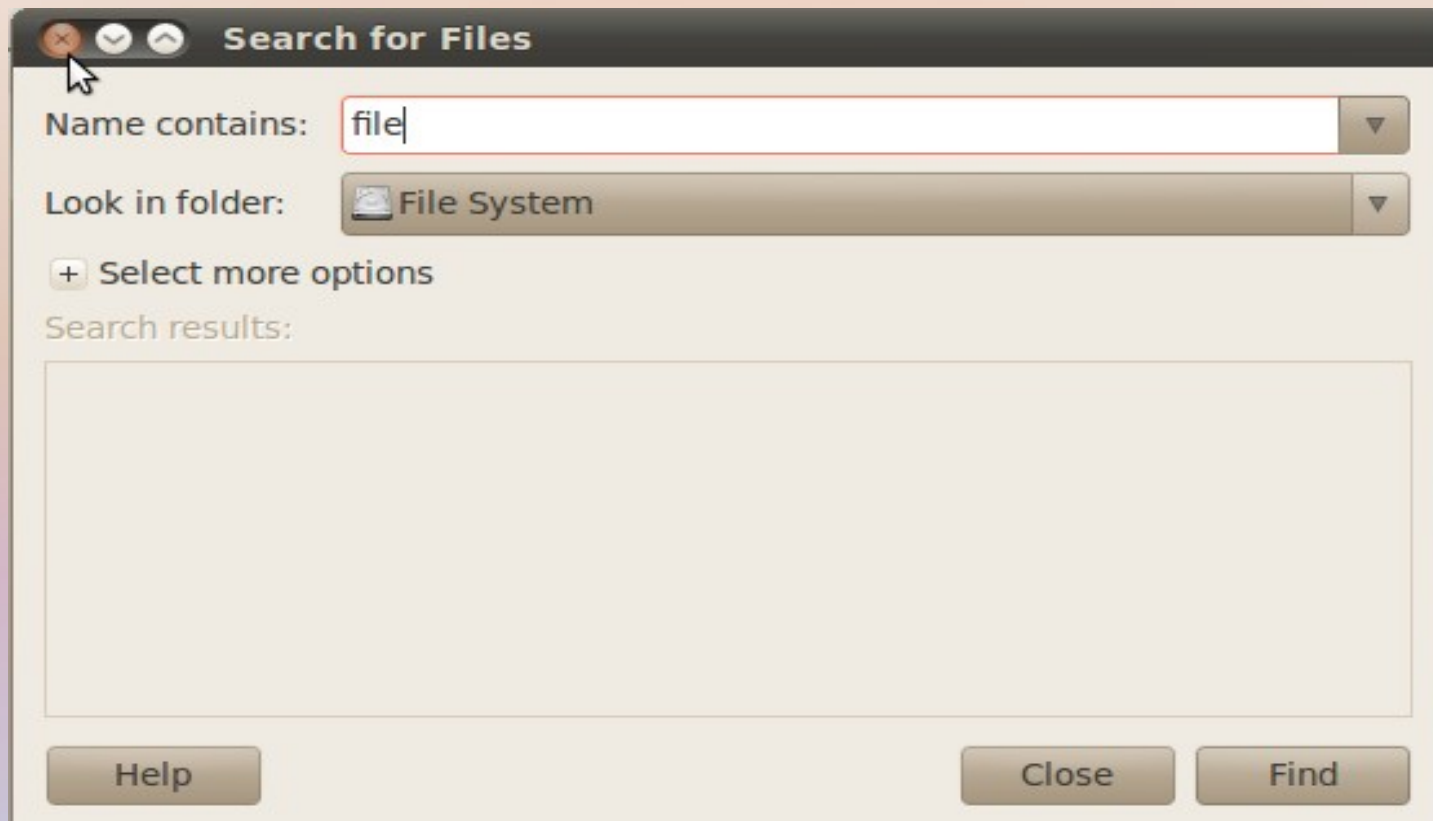
File Edit View Terminal Help

User@computer-name ~\$

User@computer-name ~\$ clear



Search Tool



find <dest> -name file-name

Linux files DB

Lets update linux files data base :



sudo updatedb



locate file-name

Package Management



System >> Administration >>
Synaptic Package Manager.



```
sudo apt-get install <pckg>
```

Process management



System >> Administration >> System Monitor.



ps aux



top

Process termination:



kill p-id



pkill p-name



kill -9 p-id



killall p-id

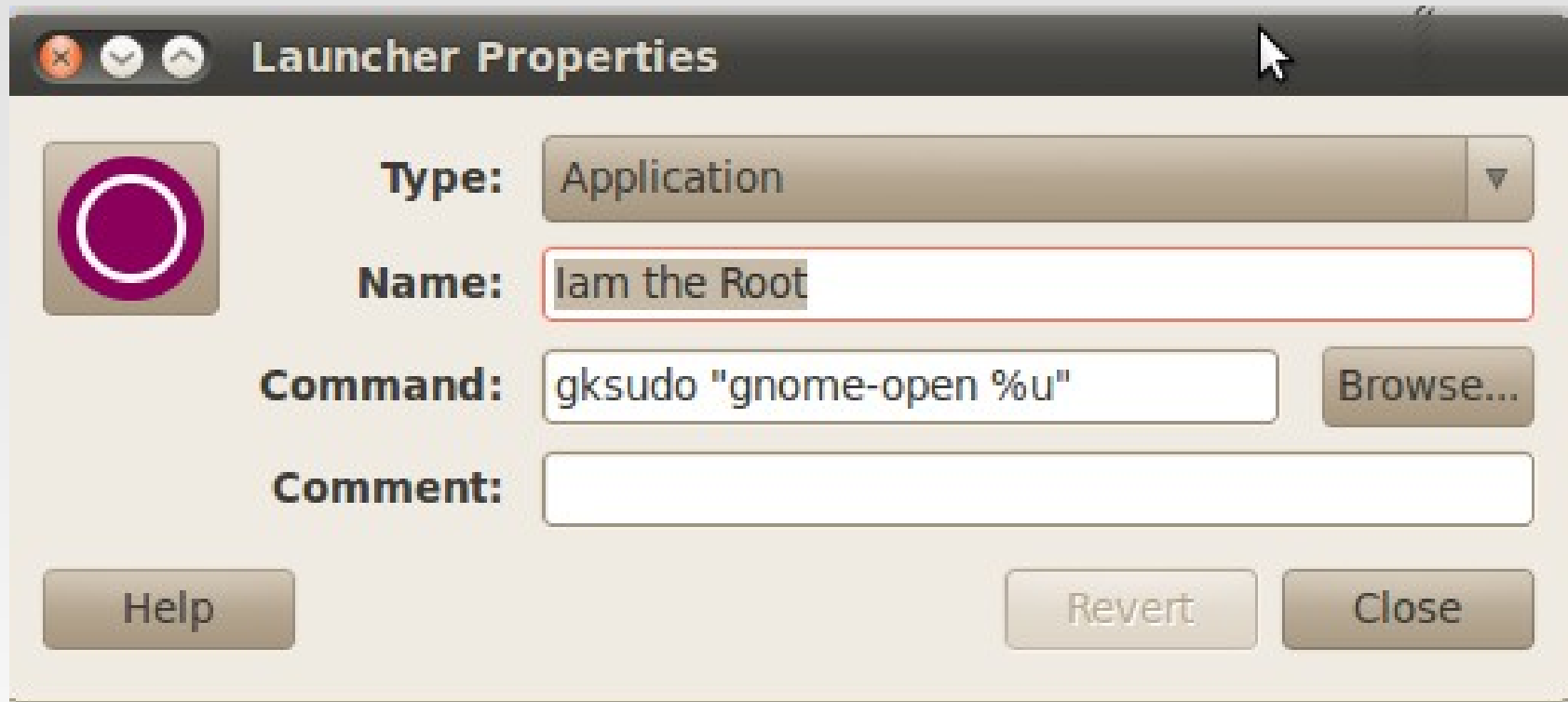


xkill

Launcher



Lets create my buttons...

A screenshot of the 'Launcher Properties' dialog box. It has a title bar with standard window controls and the text 'Launcher Properties'. Inside, there's a purple circular icon on the left. To its right, the 'Type' is set to 'Application' in a dropdown menu. The 'Name' field contains 'Iam the Root'. The 'Command' field contains 'gksudo "gnome-open %u"' and has a 'Browse...' button next to it. The 'Comment' field is empty. At the bottom, there are three buttons: 'Help', 'Revert', and 'Close'.

gksudo firefox

Compression..



* Create .tar.gz compressed file:

1. Create .tar file:

```
$ tar -cvf new_name.tar folder_or_file
```

2. Create .gz file:

```
$ gzip new_name.tar
```

* Extract from .tar.gz compressed file:

1. Create .tar file:

```
$ gunzip new_name.tar.gz
```

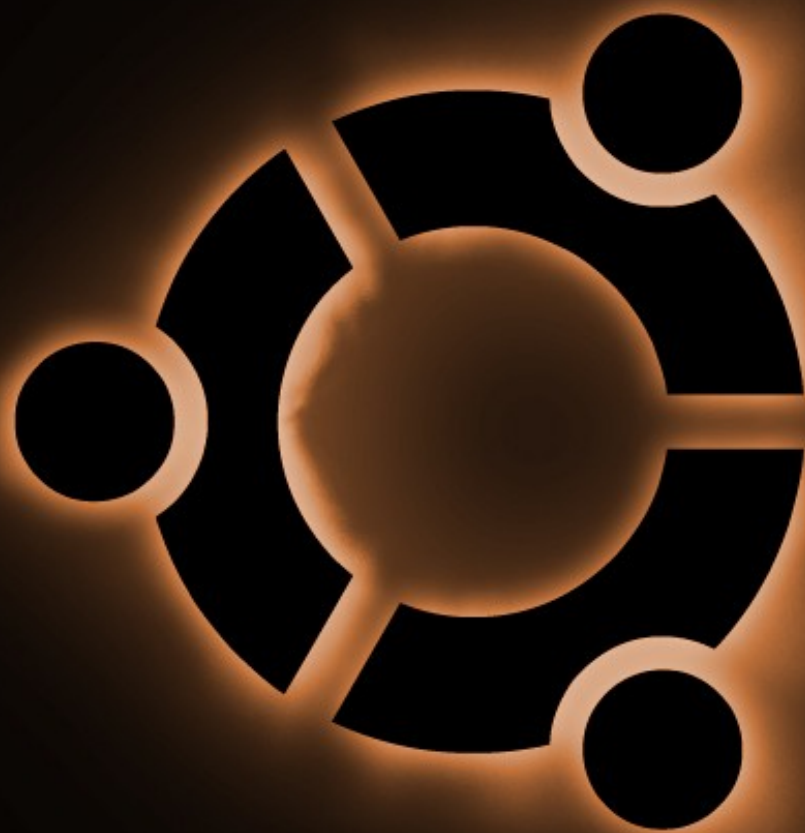
2. Create .gz file:

```
$ tar -xvf new_name.tar
```


Linux Variables



```
$ echo $PATH  
$ echo $USER  
$ echo $SHELL
```



UBUNTU

LINUX FOR HUMANS, LINUX FOR HEROES