

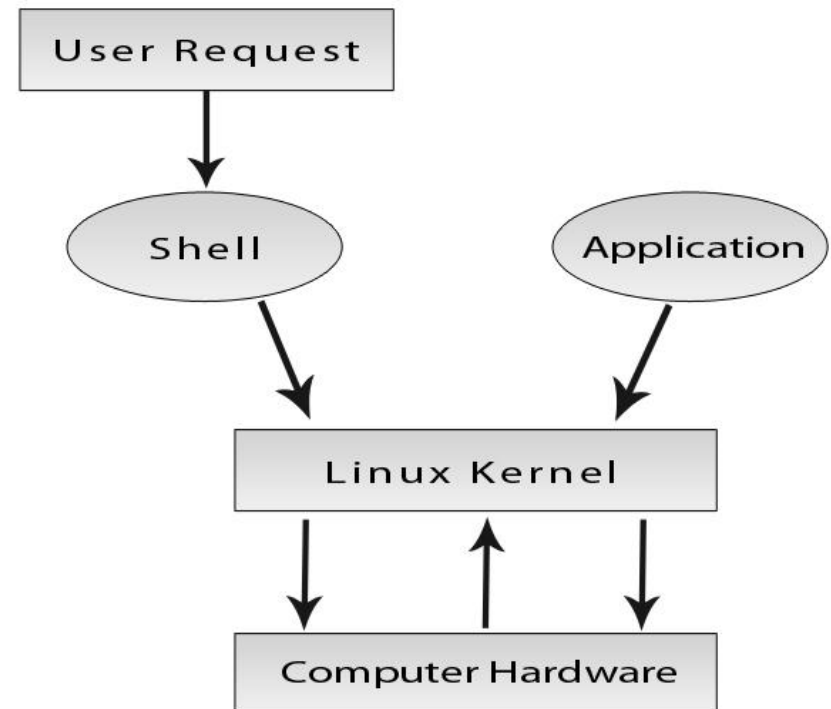
Programming Technique II – SCJ1023

Introduction to Linux

Associate Prof. Dr. Norazah Yusof

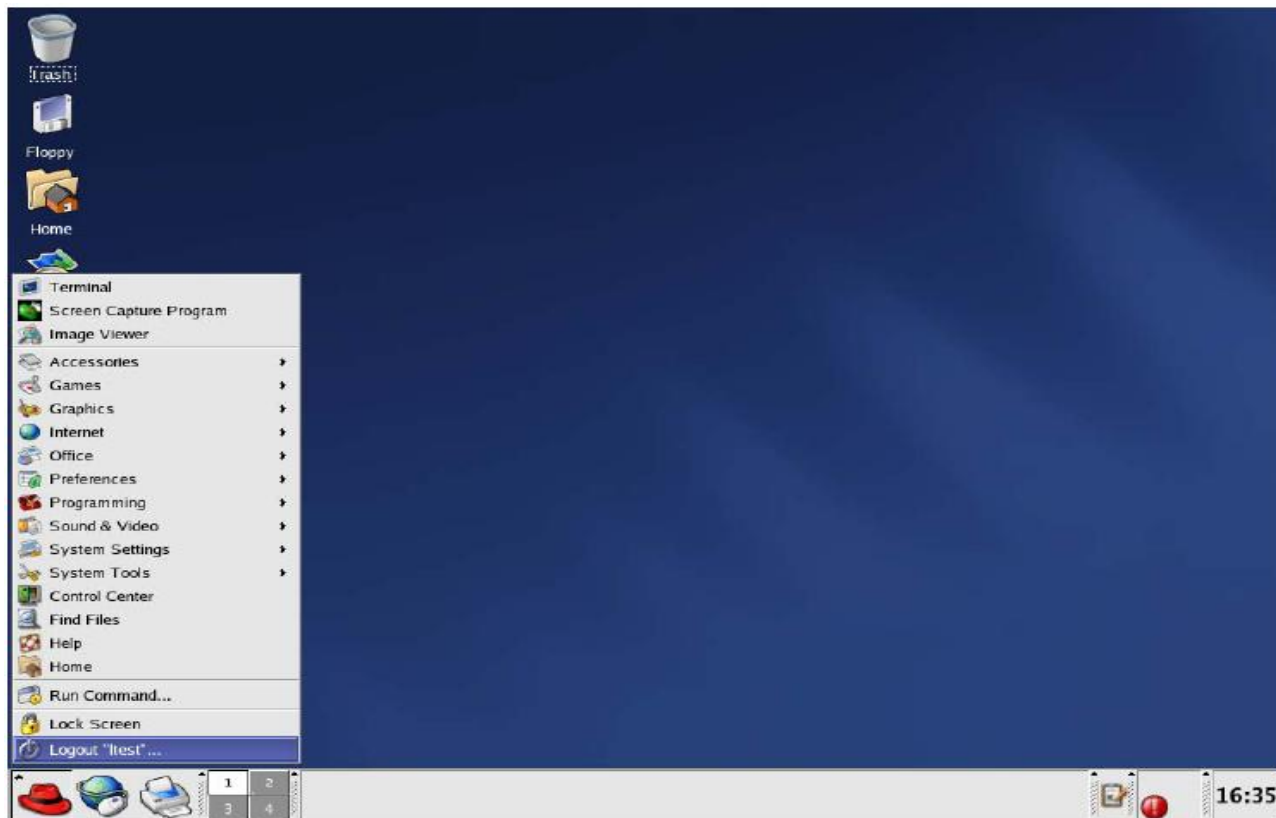
What is Kernel?

- Kernel is the core of Linux Os (Operating System).
- It acts as an intermediary between the computer hardware and various programs/application/shell.



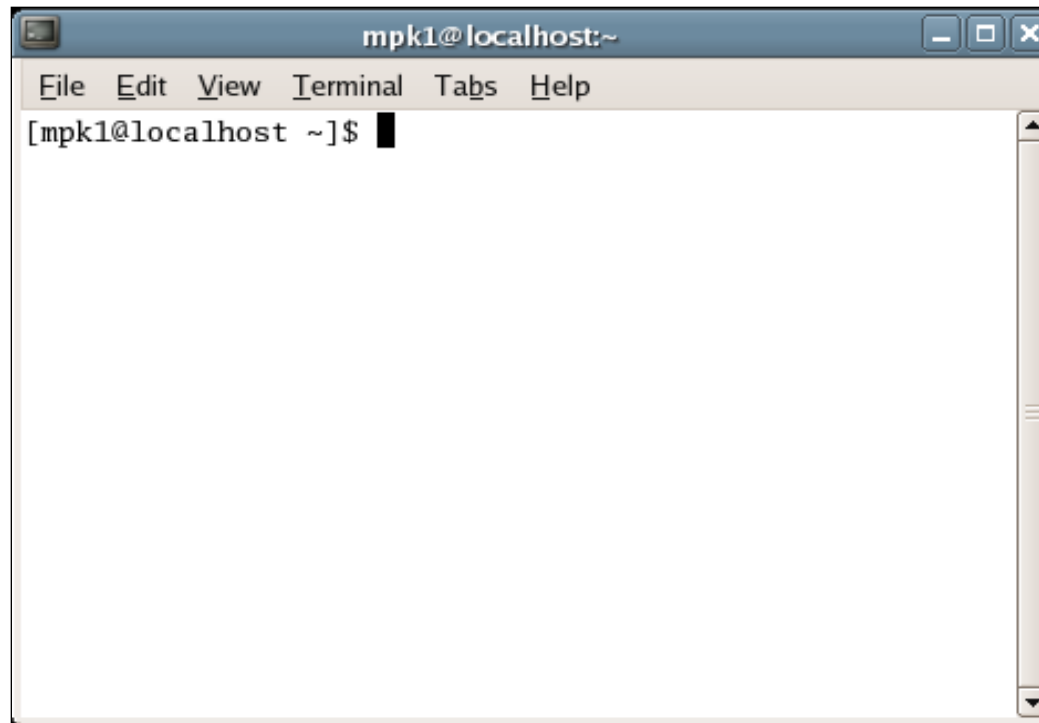
What is X-Windows?

- X-Windows is the most common graphical interface for Linux / Unix.



What is Linux Shell/Console?

- A “shell” is a program which interprets commands. User can give command by typing directly at the prompt of the **Terminal window**.



How to use shell?

- From X Windows, click the right hand button of the mouse.
- Choose: Open Terminal
- Type the shell command at the prompt.

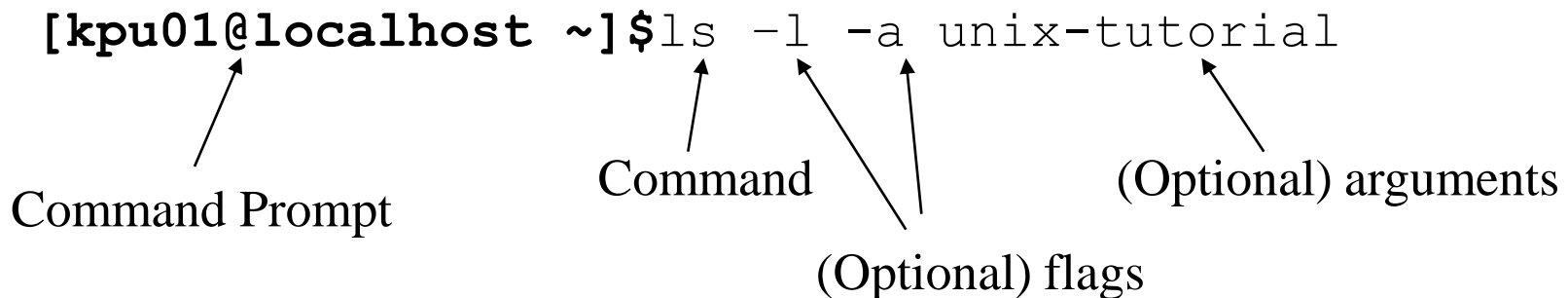
Linux Basic Command

- Linux commands are typed at the *command prompt / console*
- In Linux / Unix, all are case-sensitive

```
[prompt]$ <command> <flags> <args>
```

```
[kpu01@localhost ~]$ls -l -a unix-tutorial
```

Command Prompt Command (Optional) flags (Optional) arguments



The shell prompt

- Usually the command prompt defined as:
 - Username
 - Host name (machine name)
 - Name of the directory
- Example:

```
[kpu01@localhost ~]$
```



The Command Prompt

Linux basic command

Command	Description
ls	List the contents of a specified files or directories
pwd	Print working directory
cd	Change directory
mkdir	Make directory
rmdir	Remove directory
rm	Remove file / directory
cp	Copy file / directory
touch	create a blank file
mv	Move / rename a file / directory
chmod	Changing file / directory permissions
chown	Changing file / directory ownership

Linux basic command

Command	Description
less	Page forward and backward through file
more	Page through file
tar	Compress and uncompress files / folders to tar format
locate	Searching
mount	Mounting device

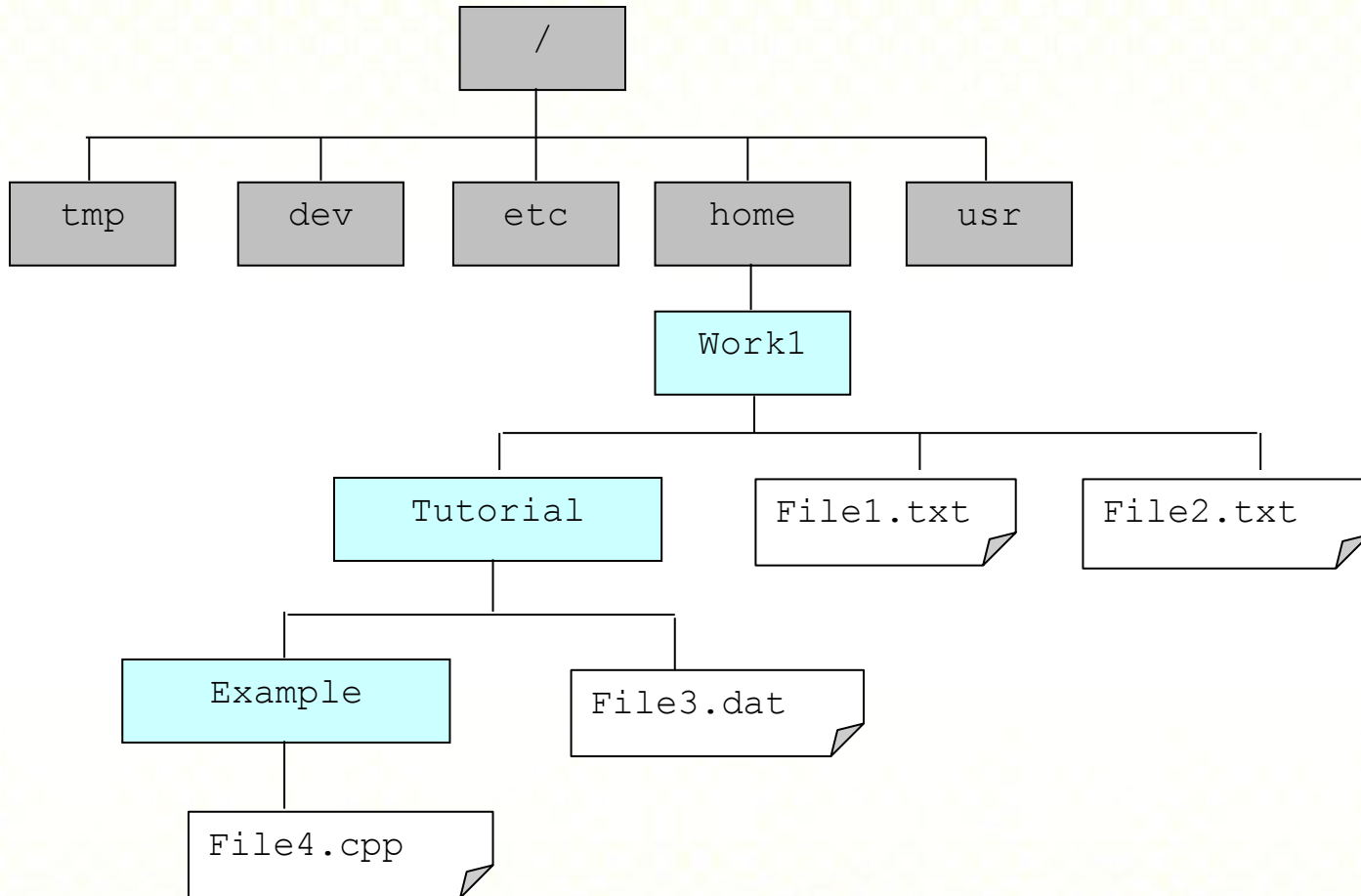
What is a directory?

- Directory or “folder” is used to organize a group of files or program files more efficiently.
- Two types of directory:
 - root directory
 - sub-directory
- A root directory is shown by the symbol ‘/’
- Sub directory is a directory under the root directory, which can be created, renamed, or deleted by user.

What is a file?

- Files are collection of data item to store information in disks or other devices.
- File management is the process of managing files such as reading data, writing to files, execute access to users, as well as creating new file, copying files and deleting.

File directory



The file permission

- In Linux, every file contains data such as its owner, its permissions and other information which defines exactly what can be done with it, and by whom.
- The permission of files and directories can be changed.