Introduction to Linux

Tien-Lam Pham

Operating System

Why linux

TOP 10 REASONS WHY YOU SHOULD LEARN LINUX

- Community support
- High Security
- High Stability
- Education and Support
- Ease of Maintenance
- Customization
- Runs on any Hardware
- Ease of Use and Flexibility
- Open Source
- It is Free

MINDMAJIX
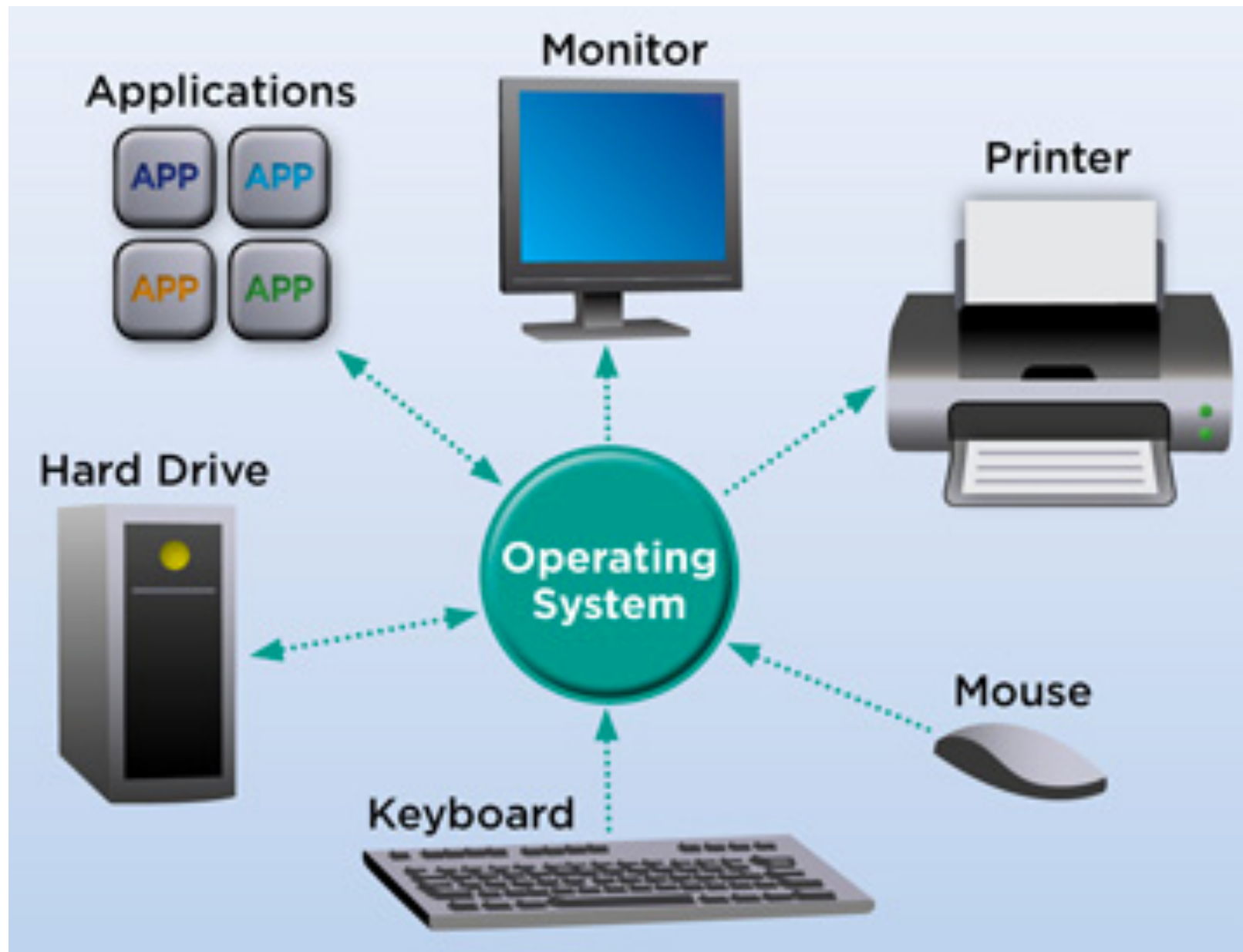
https://mindmajix.com/reasons-why-you-should-learn-linux
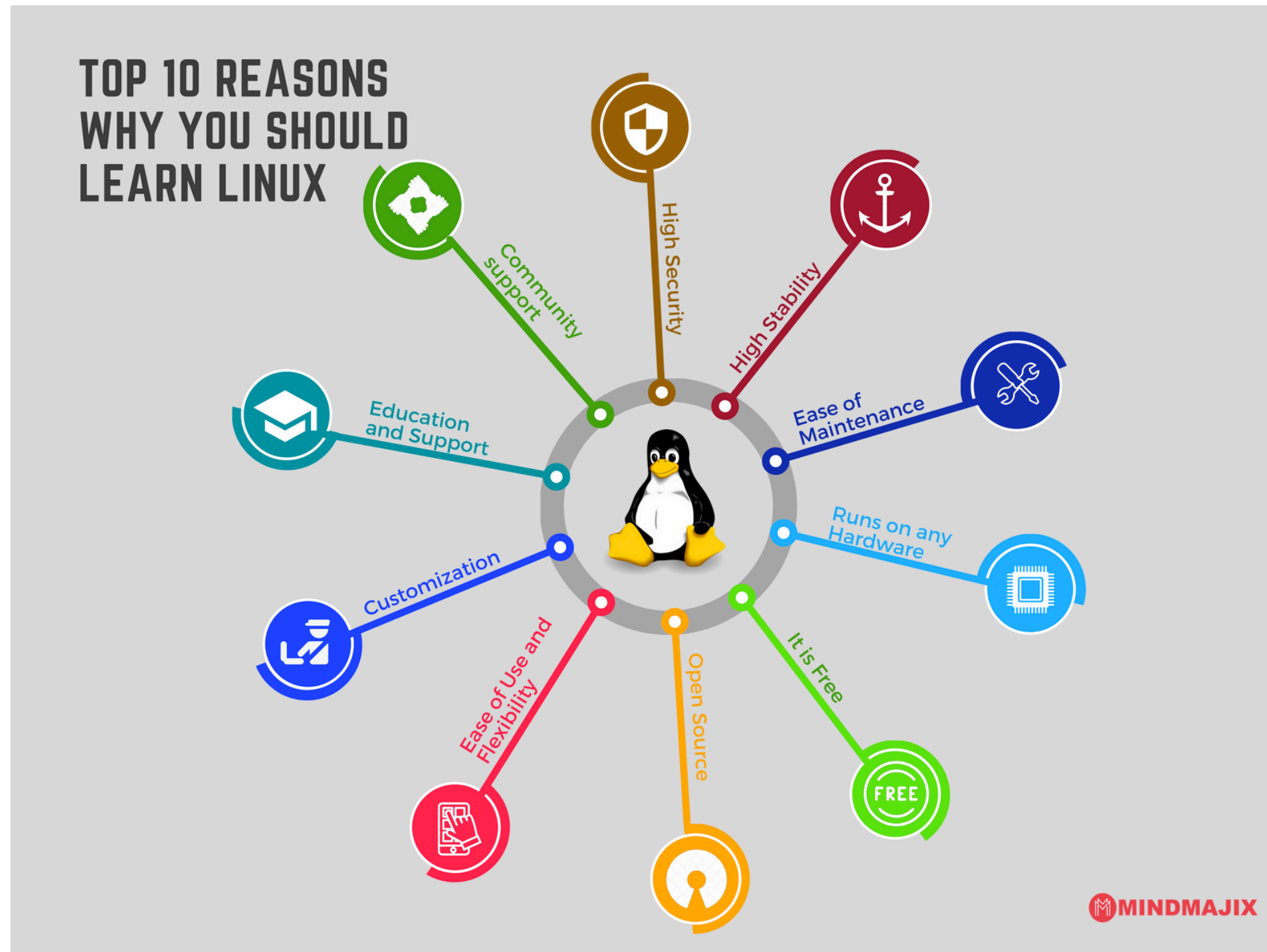
Linux distributions

Debian

- **Ubuntu** (and its derivatives)
- **Linux Mint, Linux Mint Debian Edition**
- **Kali Linux**
- **Linux lite**
- **Raspbian**
- **Tails OS**
- **Knoppix, etc**

Debian based OS use the Debian Package (dpkg) for managing software (.deb), -apt
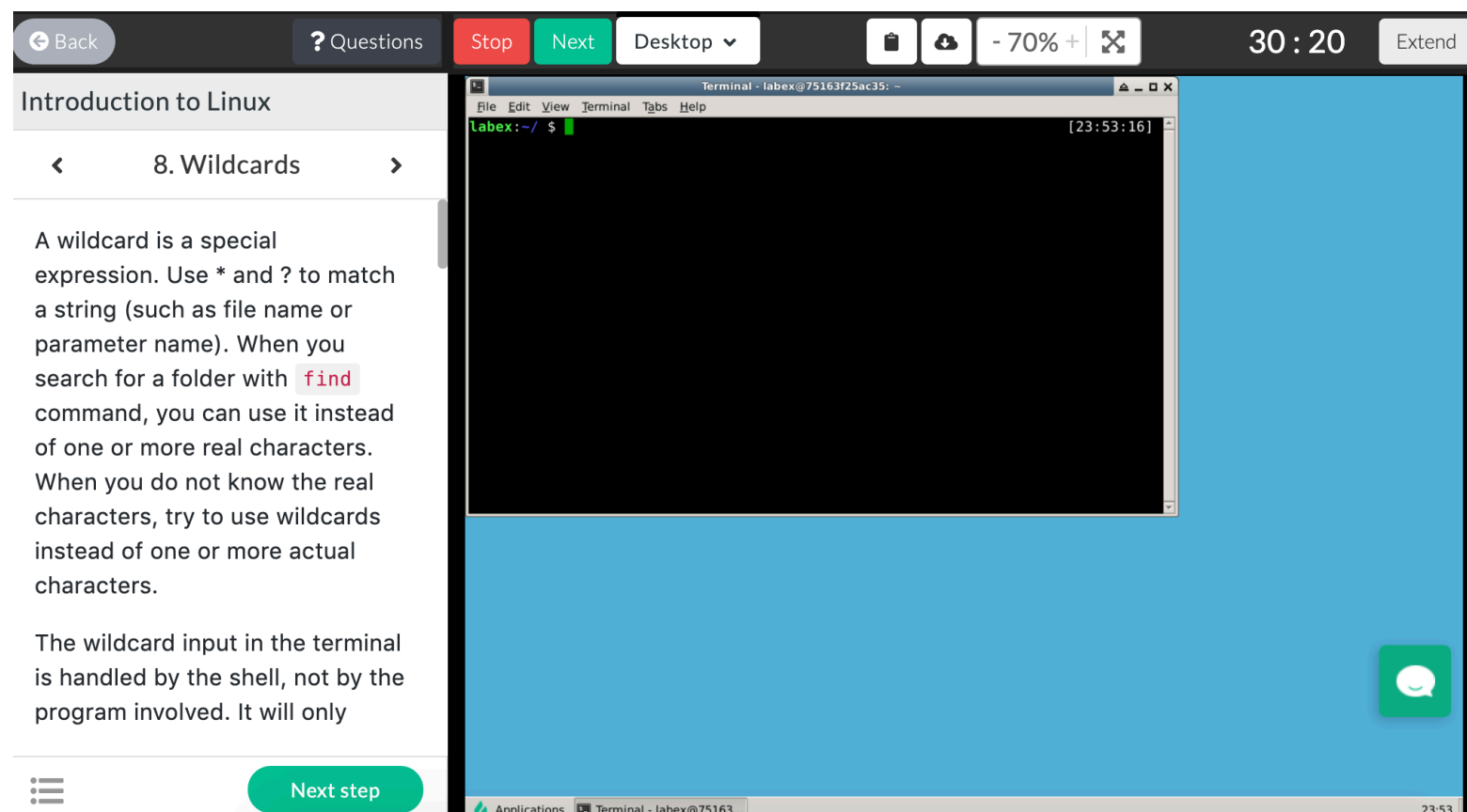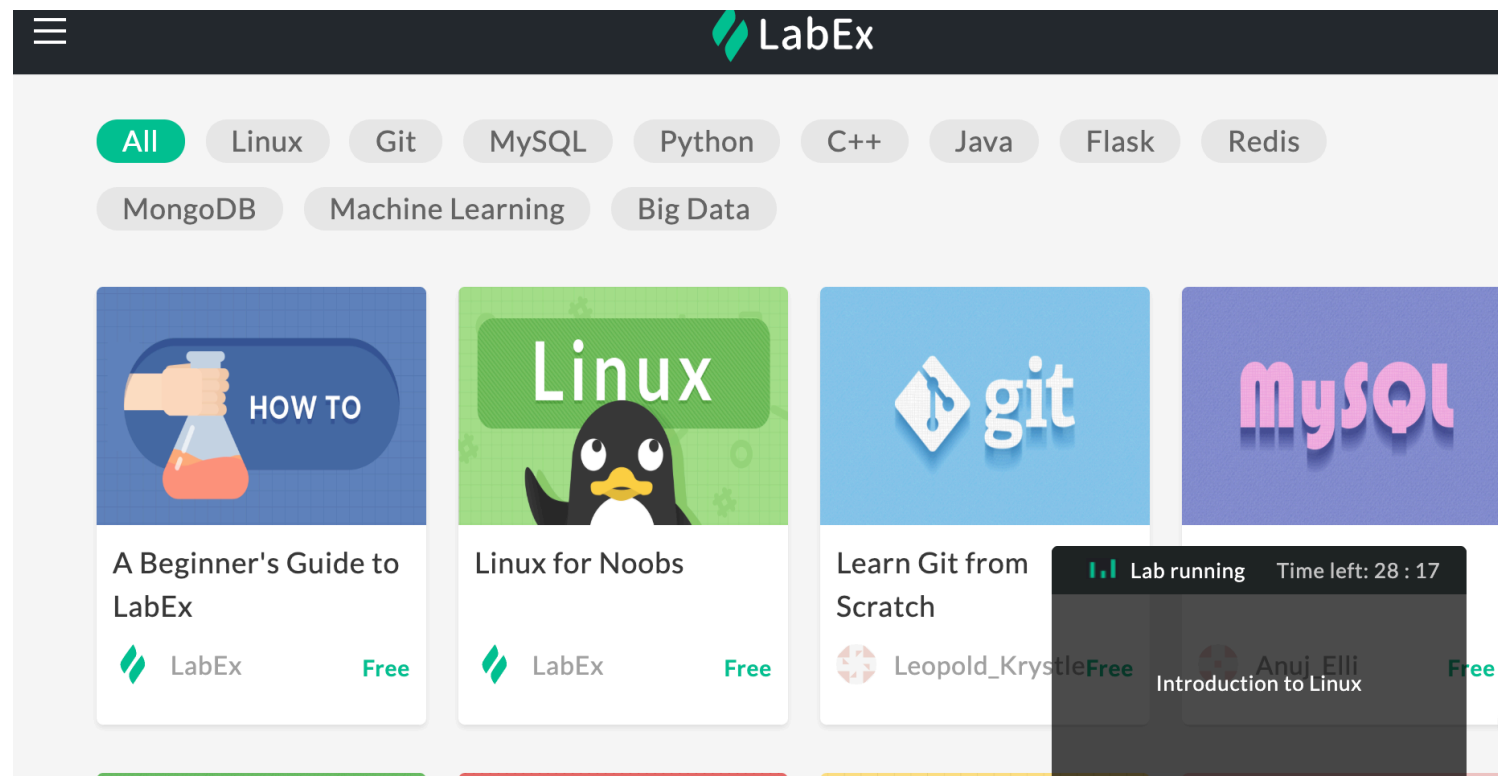
Linux distributions

Red Hat Linux

- Red Hat Enterprise Linux (RHEL)

- Fedora

- CentOS

- EduLinux

- Scientific Linux, etc

These distros utilize the Redhat Package Manager (.rpm), yum for managing software.

Where to learn

Where to Learn

Linux Fundamentals

Paul Cobbaut

Publication date 2015-05-24 CEST

Abstract

This book is meant to be used in an instructor-led training. For self-study, the intent is to read this book next to a working Linux computer so you can immediately do every subject, practicing each command.

This book is aimed at novice Linux system administrators (and might be interesting and useful for home users that want to know a bit more about their Linux system). However, this book is not meant as an introduction to Linux desktop applications like text editors, browsers, mail clients, multimedia or office applications.

More information and free .pdf available at **http://linux-training.be** .

Room 301 B Phenikaa Uni!

Where to Learn

https://vietjack.com

Linux Filesystem Hierarchy
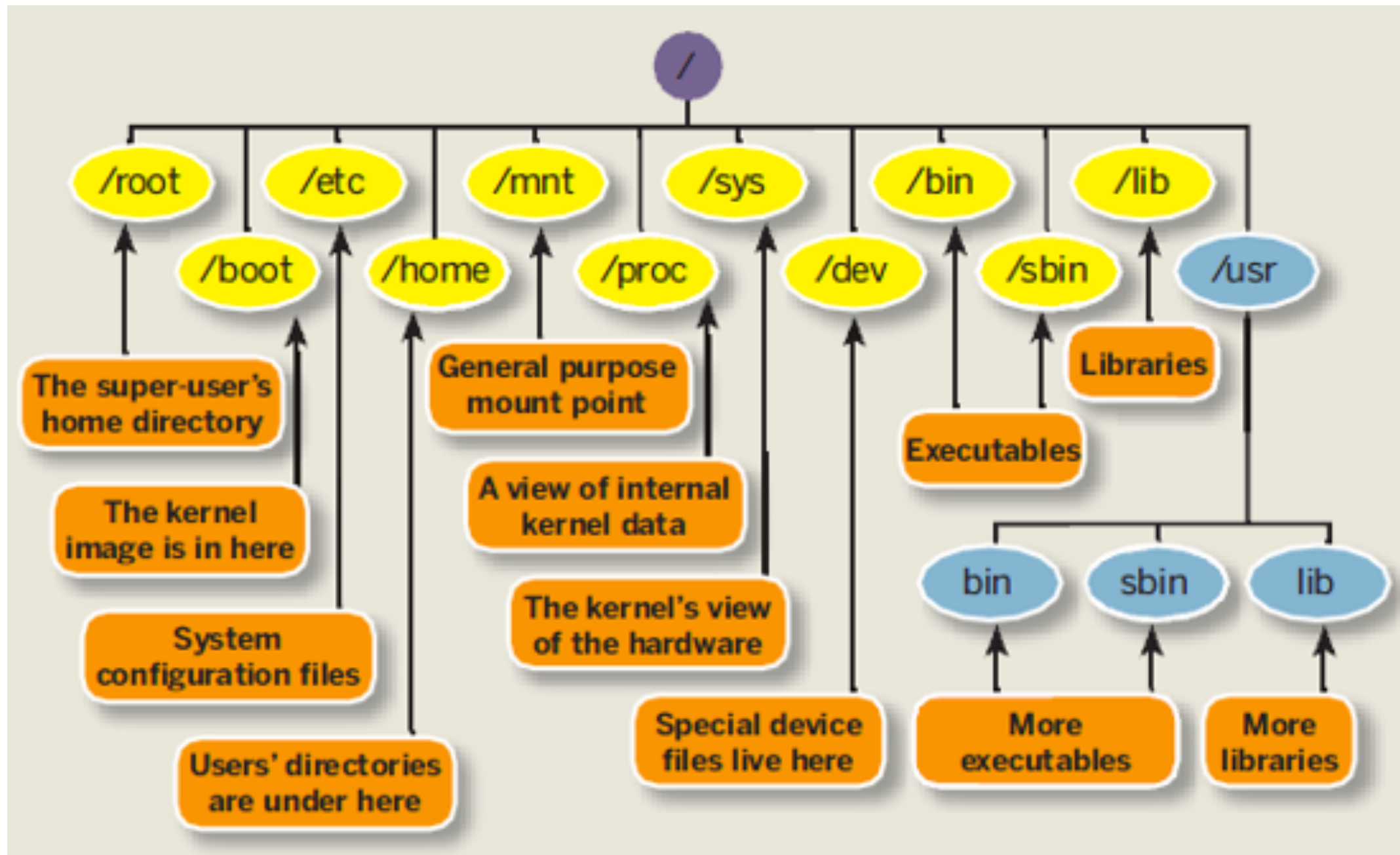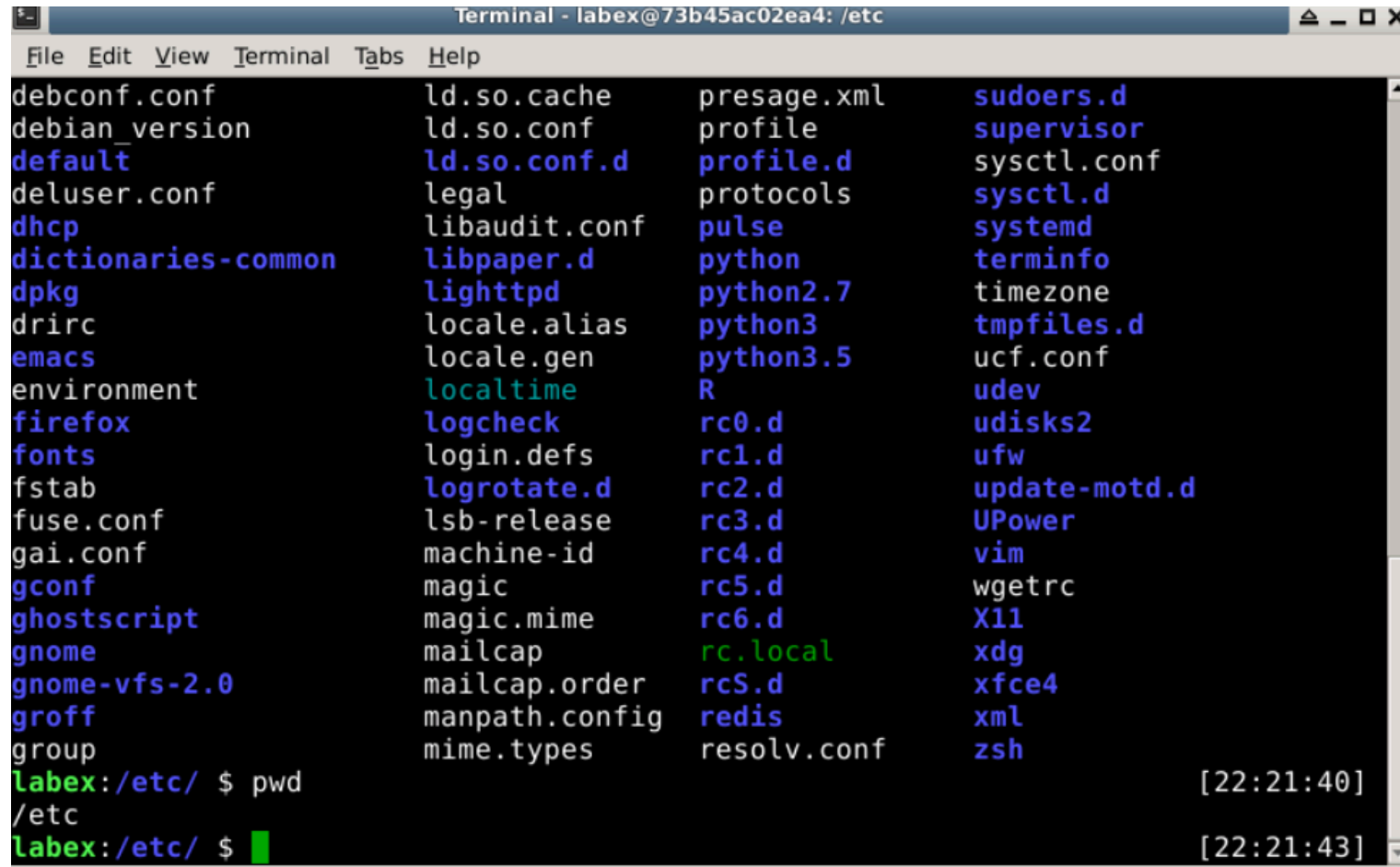
Read "linuxfun" section 11

Linux Pathname

Relative Pathnames for file3
1 `../usr/staff/joan/file3`
2 `usr/staff/joan/file3`
3 `staff/joan/file3`
4 `joan/file3`
5 `file3`
6 `../joan/file3`
7 `../../joan/file3`
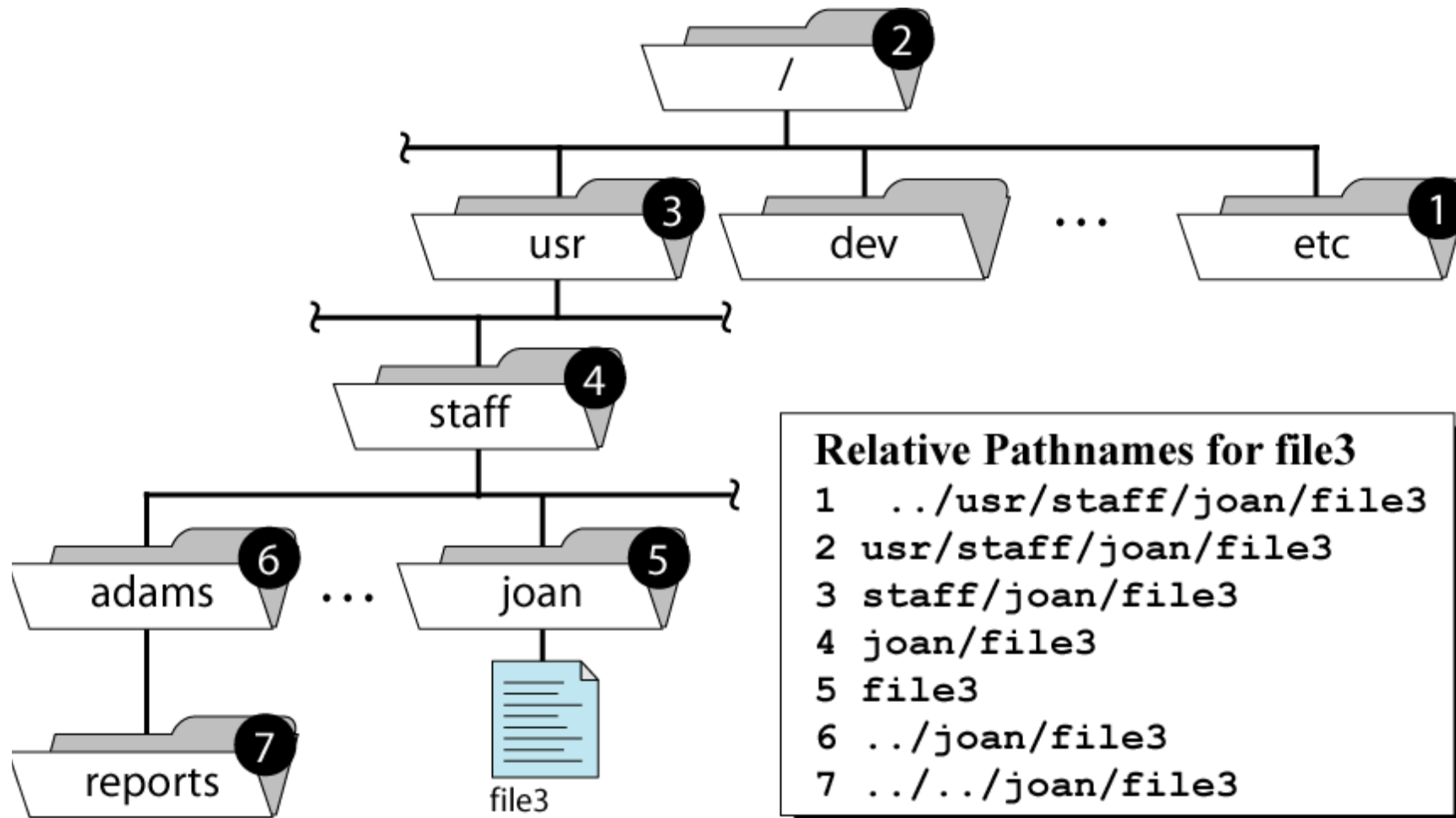
Linux Terminal: command-line UI

Linux terminal Emulator
Gnome-terminal
Kconsole
xterm
etc

Linux commands

Syntax: command [options] <arguments>

ls

man

whatis

pwd

cd

mkdir

rm

mv

cp

Read "linuxfun" section 7-10

Linux I/O Redirection

Overwrite

- **>** – standard output

- **<** – standard input

Append

- **>>** – standard output

- **<<** – standard input

command | command

Redirects the standard output from the first command to the standard input of the second command.

Shortcut

- Auto-complete pathname: tab

- Force to terminate a command: Ctrl + c

- End or exit the terminal: Ctrl + d

- Put Current program to background: Ctrl + z

- Move to beginning of a line: Ctrl + a

- Move to the end of a line: Ctrl + e

- Remove current line: Ctrl + k

- Move up: Ctrl + p

- Move down: Ctrl +n

Wildcards

ls a*

mv a* dir_name/

ls a?bc.sh

ls a[abcdcio]st.sh

ls ??st*

ls [clst]*

ls [clst][io]?t*

ls *abc*

ls users-[0-9][a-zA-Z0-9][0-9]*

ls users-[0-9][a-zA-Z0-9][a-zA-Z]*

ls users-[0-9][a-zA-Z0-9][a-zA-Z]*

ls users-[0-9][!0-9][a-zA-Z]*

Debian Open Repository

- Search packages

  apt-cache search package_name
- Install packages

  apt-get install package_name