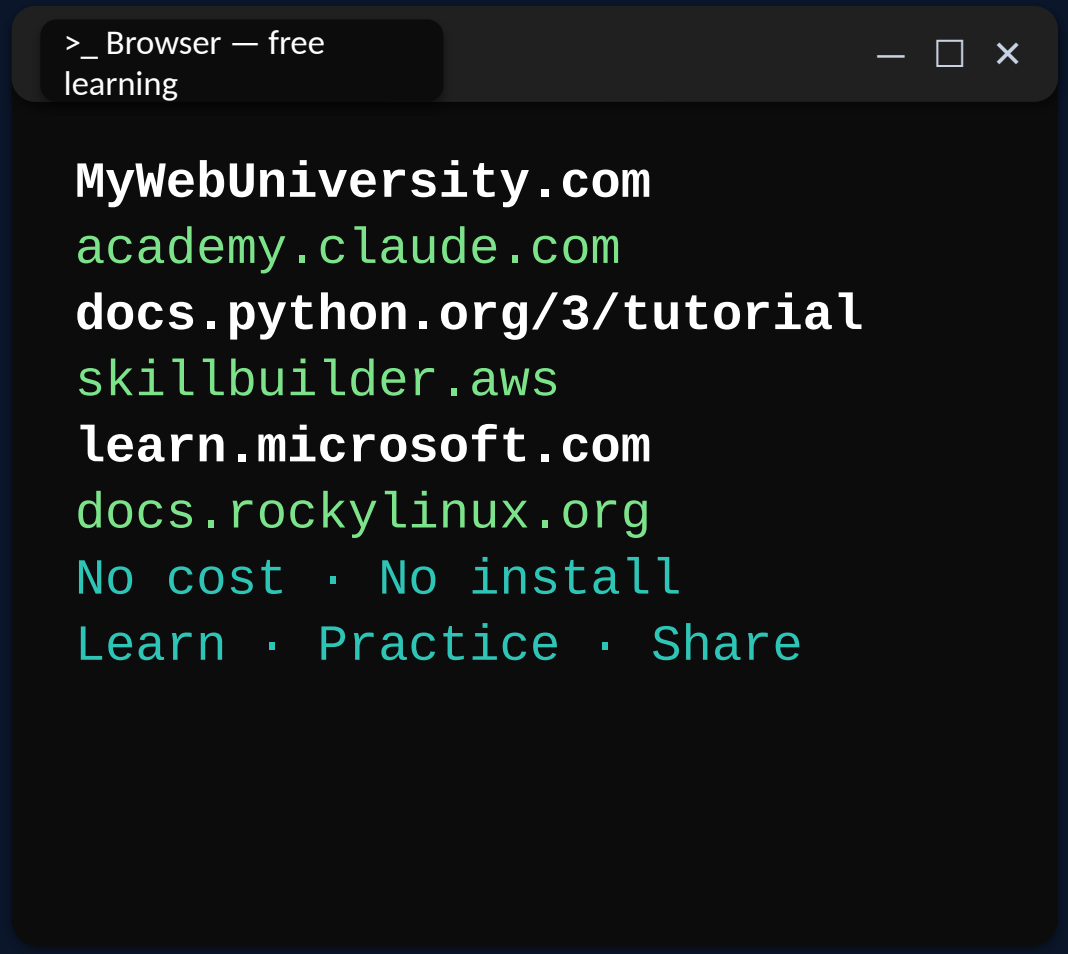


LESSON 7 OF 12

Free Learning Websites

Linux · Python · AI · Cloud · Security · Claude

Operating Systems: Linux Foundation, Linux Journey, OSTEP & Cisco

Full Course · Free learning sites · checked Nov 2026

What You Will Learn in Lesson 7

- Three levels: user, administrator, how it works inside
- Linux Journey: friendly beginner lessons
- Cisco NetAcad: Operating Systems Basics and Linux Unhatched
- Linux Foundation: LFS101 and 75+ free courses
- OSTEP: the free operating-systems textbook
- Practice: LinuxOnBrowser, MyWebUniversity man pages, Killercoda
- A free operating-systems path

Three Levels of OS Knowledge

Level	You can…	Free places
User	Use files, apps, settings, the shell	Linux Journey, Cisco OS Basics, MyWebUniversity
Administrator	Users, packages, services, storage, networking	LFS101, Rocky and Ubuntu docs, RH024
Inside	Processes, scheduling, memory, file systems	OSTEP, Linux kernel docs
Practice	Type commands every day	LinuxOnBrowser.com, Killercoda

Linux Journey and Cisco NetAcad

Site	What you get
linuxjourney.com	Free, friendly lessons: Grasshopper → Journeyman → Networking Nomad
Topics	Command line, text-fu, permissions, processes, packages, devices, boot, networking
Quizzes	Short exercises after each lesson
Cisco NetAcad: Operating Systems Basics	Free, about 12 hours — computer and mobile OS fundamentals
Cisco NetAcad: Linux Unhatched	Short free introduction to Linux
Also on NetAcad	Computer Hardware Basics — useful for A+ style knowledge

Linux Foundation: Free Courses

Course	Details
LFS101 Introduction to Linux	Free; graphical and command line across major distribution families
Where	training.linuxfoundation.org › Free Courses (also on edX)
75+ free full-length courses	Linux, open source, Kubernetes, cloud native, security
Examples	Intro to Kubernetes, Intro to DevOps and SRE, Open Source Licensing basics
Badges	Free completion badges on many courses
Paid	Certification exams (LFCA, LFCS, CKA) cost money

OSTEP: How Operating Systems Really Work

Part	Topics
Book	Operating Systems: Three Easy Pieces — Remzi and Andrea Arpaci-Dusseau
Where	pages.cs.wisc.edu/~remzi/OSTEP — free chapters as PDFs
Virtualization	Processes, scheduling, address spaces, paging, TLBs, swapping
Concurrency	Threads, locks, condition variables, semaphores, bugs
Persistence	Disks, RAID, file systems, journaling, SSDs, distributed systems
Extras	Homework simulators and C code to try on Linux

Practice: See the OS at Work

```
# On LinuxOnBrowser.com or any Linux lab
$ uname -a ; cat /etc/os-release | head -2
$ ps -ef | head -5              # processes (OSTEP: virtualization)
$ top -b -n 1 | head -12        # CPU scheduling and load
$ free -h                       # memory and swap
$ cat /proc/cpuinfo | grep -c processor
$ df -hT ; lsblk                # file systems and disks (persistence)
$ ls -l /proc/self/fd           # open file descriptors
$ man 2 fork                    # system call docs — MyWebUniversity PDF too
```

A Free Operating-Systems Path

Weeks	Do this
1–2	Linux Journey Grasshopper + MyWebUniversity Chapters 1–2 on LinuxOnBrowser
3	Cisco Operating Systems Basics (Windows, macOS, mobile)
4–7	LFS101 Introduction to Linux + MyWebUniversity Chapters 3–5
8–10	OSTEP: Virtualization chapters + homework
11–12	OSTEP: Concurrency and Persistence highlights
Then	Admin skills: Rocky / Ubuntu docs, Red Hat RH024 (lessons 11–12)

Summary and Homework

- Three levels: user, administrator, inside
- Linux Journey + Cisco OS Basics for beginners
- Linux Foundation LFS101 + 75 free courses
- OSTEP: free textbook on virtualization, concurrency, persistence
- Practice every command on LinuxOnBrowser.com
- Homework: finish Linux Journey 'Command Line' and enroll in LFS101

Thank You! 🙏

Free videos & PDFs: www.MyWebUniversity.com

Slides for this lesson: MyWebUniversity.com/presentations

YouTube: @MyWebUniversity · @MyWebUniversity-Dari

Wahidullah Lutfy — Founder and Director of IT of MyWebUniversity, and CS teacher

Book: The Direct Path to Linux Ubuntu (Amazon · Barnes & Noble)

Learn it, then pass it on.