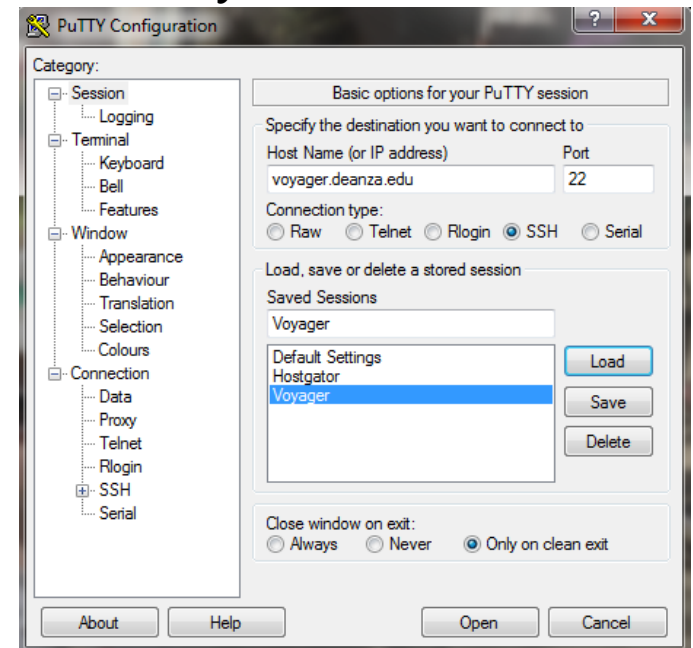# Getting Started

Learning Objectives

- Connect to the Linux system

- Login authentication

- Issue commands

- Find documentation

- Display system information

Accessing Linux

- Option 1 – Walk to the ACT Lab
  - Choose among Windows, Mac OS X, and Linux
- Option 2 – Remote login with Secure Shell (SSH)
  - Utility to connect to remote servers
  - Can run commands, copy files, etc.
  - Require account on remote server
  - Provide a secure, encrypted connection
  - Requires SSH client

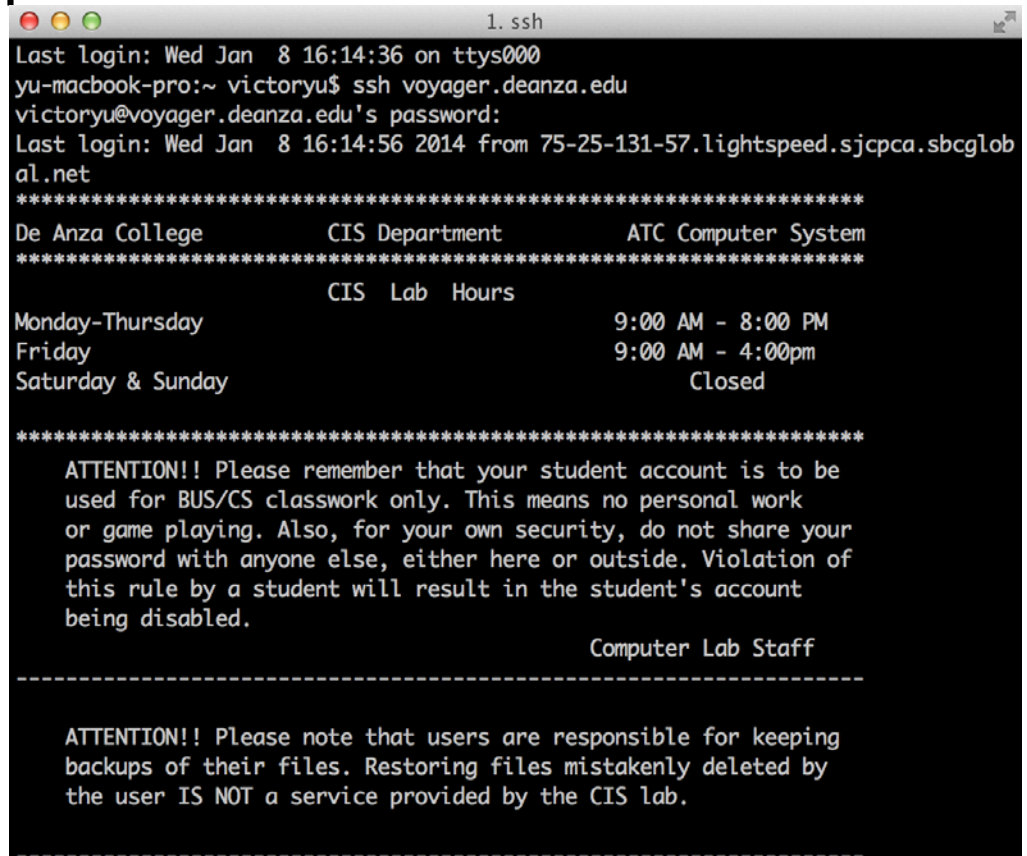# Using SSH to Reach Voyager (Windows)

- PuTTy is a free SSH client
  - Single file to download. Just run putty.exe
  - Lots of options available (generally unnecessary)
- SecureCRT
  - Free from Umass OIT

Using SSH to Reach Voyager (OS X)

- Open terminal and type

  - ssh voyager.deanza.edu

Verifying SSH Server Identity

- Must verify server identity the first time you connect

- Every server has a unique RSA fingerprint

- Generally you can trust that the server is correct. So just type "yes"

- Only will ask the first time you connect to the server, or if the server changes.

Login

- The process of identifying yourself to the system

- Linux keeps track of login activities

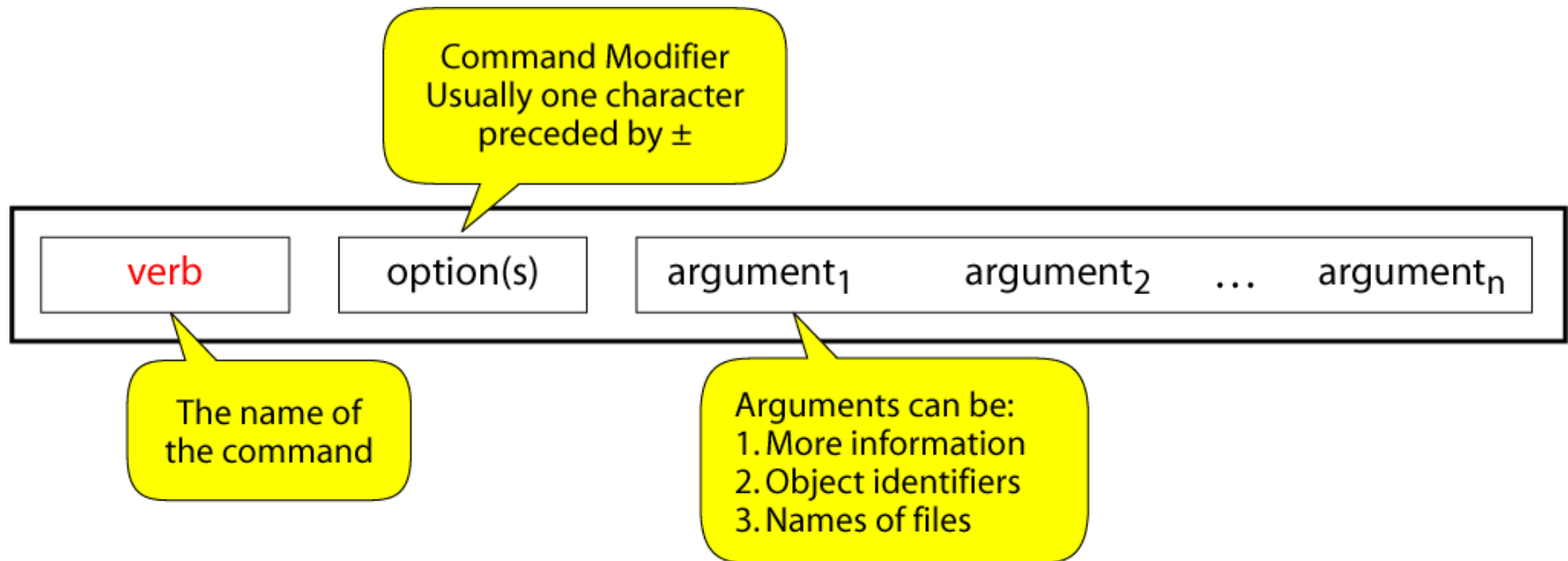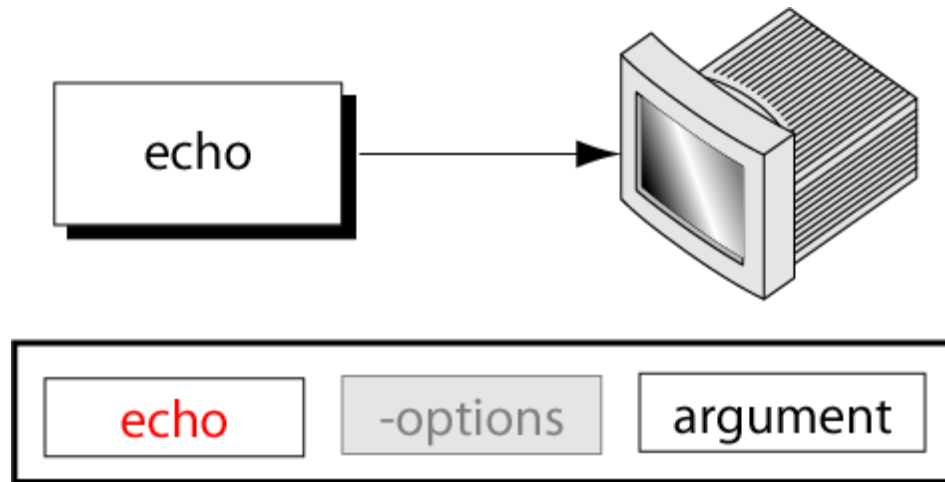- Once logged in, the shell starts

Change Password
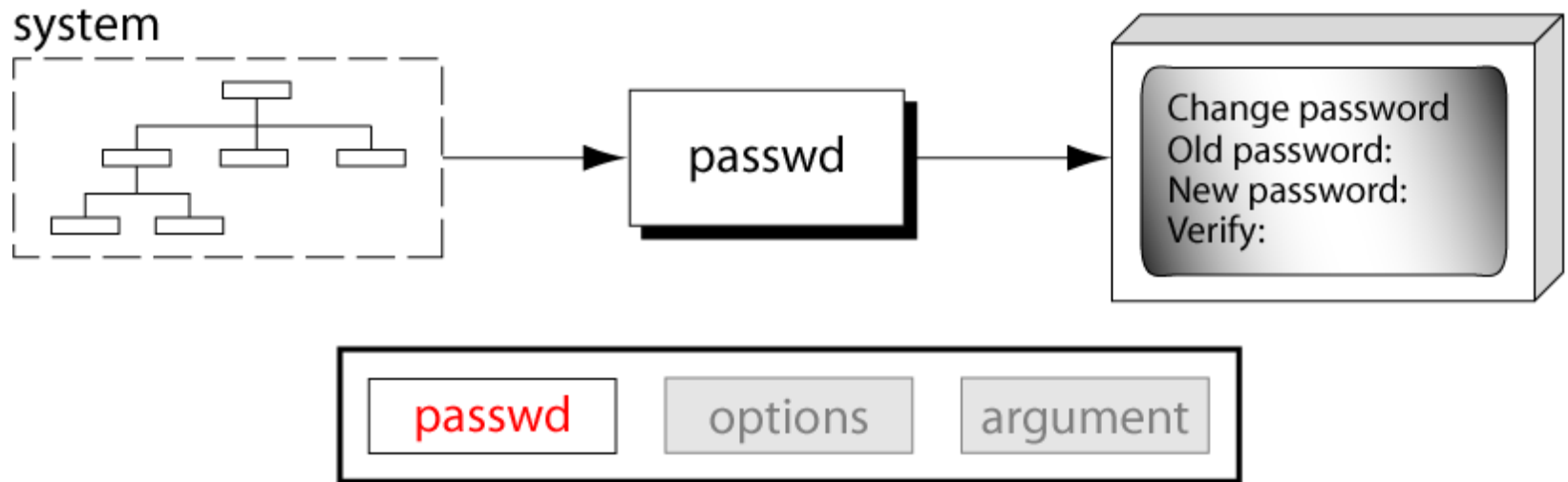
Lowdown on Passwords

- Protect your password

- At least 6 characters long

- Choose a hard-to-guess password

- Include non-alphanumeric

- Auto generate password using pwgen
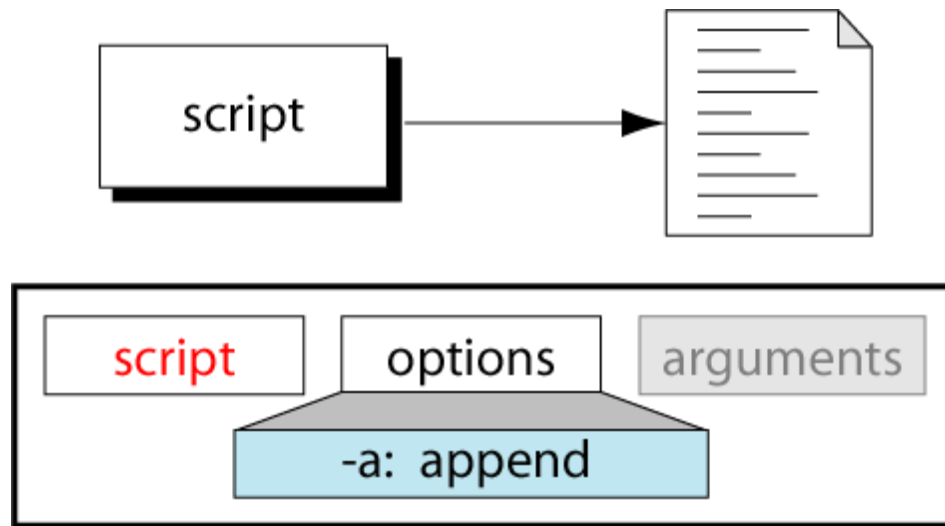
General Command Format

The echo Command

- echo is one the bash builtins

- echo writes stuff to the terminal

Record a Session with `script`

Edit Command Line

- Erase a character
  - BACKSPACE
  - DEL
  - CONTROL-H
- Delete a word
- Delete a line
- Repeat a command

Some Command Line Tips

- Press <TAB> to auto complete a command, file name, etc.
- Press Up and Down to scroll through recently run commands

Abort Execution

- To terminate a running program:
  - CTRL-C
  - Or sometimes `DEL`

Control Key Commands

ctrl-s freezes the screen and stops any display on the screen from continuing (equivalent to a no-scroll key) (sometimes takes a moment to work)

ctrl-q un-freezes the screen and lets screen display continue

ctrl-c interrupts a running program

ctrl- same as ctrl-c but stronger (used when terminal doesn't respond)

ctrl-z suspends a running program (use the fg command to continue the program)

ctrl-h deletes last character typed

ctrl-w deletes last word typed

ctrl-u deletes last line typed

ctrl-r redraws last line typed

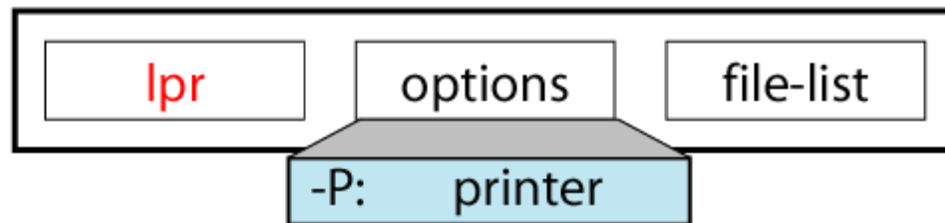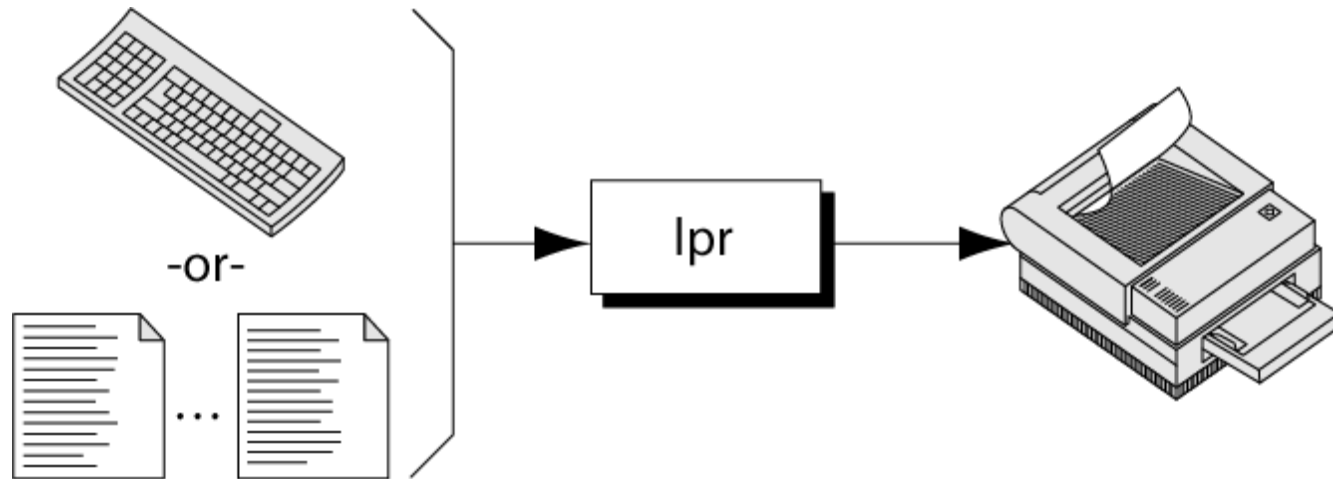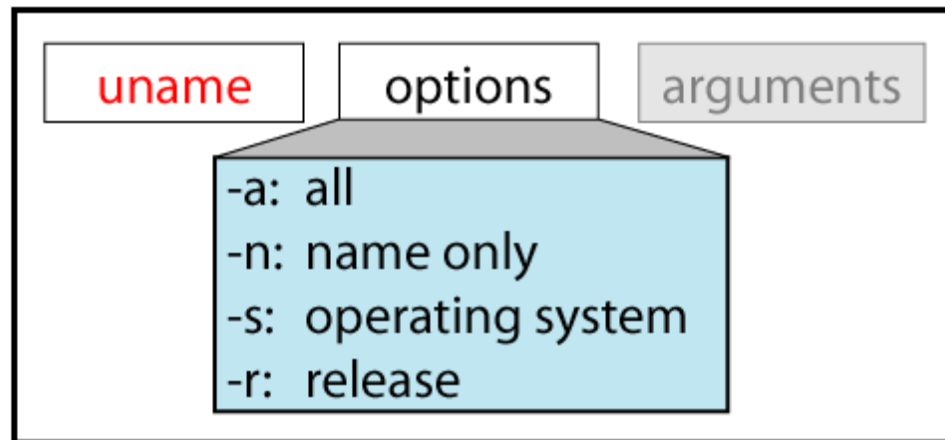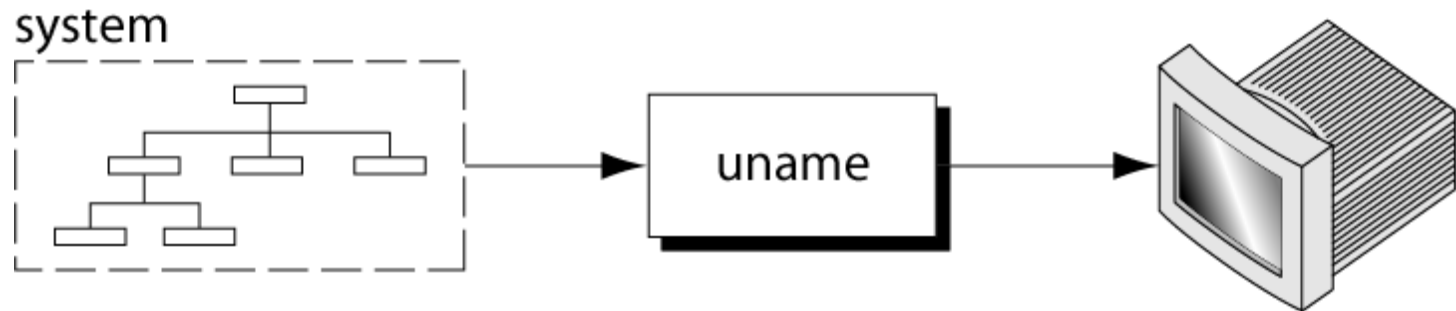**ctrl-d** ends text input for many UNIX programs, including mail and write.

Get Help with man

- To access a `man` page:

  - `man [command]`

- To find a specific `man` page:

  - `man -k [command]`

  - `man l [command]`

- Alternatively, use:
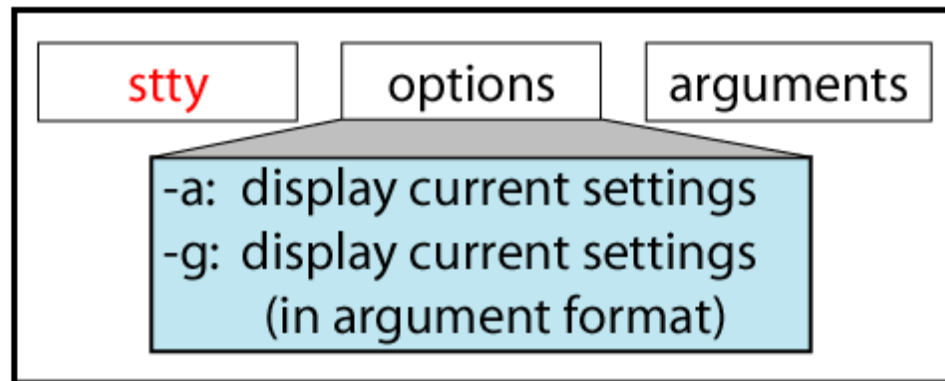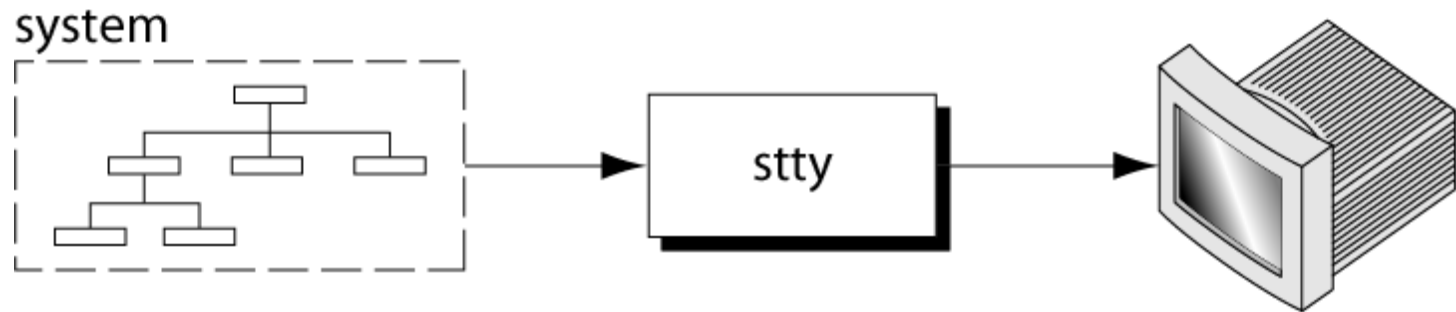
  - `apropos [command]`

  - `whatis [command]`
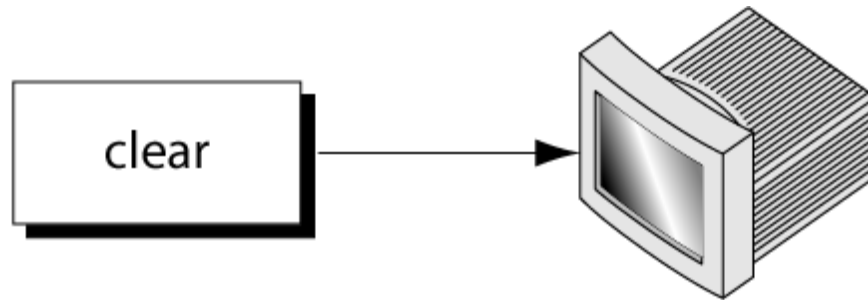
The `lpr` Command

The `uname` Command

Fixing Terminal Setting with `stty`

The `clear` Command

Log Out

- `Logout` – Exit a login shell

- Or `exit`

- Or `quit`