

Final Exam Review

▶ Final Exam

- See ACSIS for your Exam Schedule
 - Friday, Dec 16, 2011
 - 17:30 to 19:30
 - A120 (GYM)
- ▶ Two hour test closed book, no devices
- ▶ BRING A PENCIL
- For marking your multiple choice Scantron sheet
 - HB or softer

Material Covered

- ▶ All Course Material is Fair Game
 - Labs (11 of them)
 - Lecture Notes
 - Lecture Discussions
 - Lecture Demonstrations
 - Lecture Questions/Answers

Study Guide

- ▶ Midterm One and Midterm Two
- ▶ You know your weaknesses because you have already been tested on these two blocks of material
- ▶ Identify the subject areas where your understanding is incomplete or foggy
 - What subjects did you have trouble with on the Midterms?
 - Re-read or even better Re-Do the Labs corresponding to those subjects
 - Study the Lecture Notes corresponding to those subjects
 - Read the Textbook (refer to the page numbers quoted in lecture notes, AND look up subjects in the Index!)
 - Use the 08bMidtermReview and 16bMidtermReview slides as only a guide for MINIMUM topic coverage

Post Midterm Topics

▶ VI

- You should know the basics, so that vi–beginner frustration and disasters do not occur when you're at a new job and forced to use vi to modify a configuration file on a headless Linux server
- Know how to launch the editor
- Know the three modes, what they're for, and how to get from one mode to another
- You should be able to somehow move or search to where you want to make a change, then make the change however you know how (without corrupting the file), and save, and quit.

Post Midterm Topics

▶ Regular Expressions

- know the difference between filename globbing and regular expressions
- Filename Globbing:
 - used in shell command lines to match file names
 - i.e. you specify patterns of relative or absolute paths (file names) for commands
 - used in `find <somedir> -name "<globexpr>"`
 - `*` means zero or more of any char
 - `?` means exactly one of any char
 - `[]` means exactly one of the chars inside

Post Midterm topics

▶ Regular Expressions:

- used in many Linux/Unix situations:
 - vi searching and search and replace: /<regex>
 - grep '<regex>'
 - many others: sed, awk ...
- Know the basics, understand examples:
 - * means zero or more of the previous “item”
 - . (i.e. the period) means exactly one of any char
 - [] means the same as it does in filename globbing
 - \$ means the end of the line or string
 - ^ means the beginning of the line or string
 - so ..* means one or more, .* means zero or more, etc

Post Midterm Topics

- ▶ Package Management
 - RPM: the Redhat Package Manager
 - Know the basic options
 - how to do queries on a package
 - how to install or update a package
 - how to erase a package
 - Yum: Yellowdog Updater, Modified
 - yum install packagename
 - yum update packagename
 - yum update
 - tar: tape archiver
 - know the basic operation (create or extract)

Shell and Shell Programming

- ▶ Be familiar with the steps the shell takes when you enter a command line (ordering of steps and what they mean)
- ▶ Actual Programming is beyond the scope of the course, but simple shell scripts are within range
- ▶ When you put commands in a file, you can run them as a script
- ▶ Use this mechanism if you need to do repetitive tasks
- ▶ You can use for loops to do repetitive tasks
- ▶ Know that cron exists and what it does

Parsing the command line

1. Substitute **history**
2. Tokenize command line (break it into "words" based on spaces and other delimiters; also known as lexical analysis, or parsing)
3. Update **history**
4. Process quotes
5. Substitute aliases and defined functions
6. Set up redirection, pipes, and background processes
7. Substitute variables
8. Substitute commands (e.g. backticks)
9. Substitute filename (called "globbing")
10. Execute (run) program that results

Grub

- ▶ grub and booting
- ▶ basic operation
- ▶ basic configuration
- ▶ Lab 11
- ▶ how grub names devices: ex (hd0,0)
- ▶ (hd0)
- ▶ (fd0)
- ▶ setup (hd0) (hd0,1)