

Final exam -- open book section
17 December, 1992

The entire exam is to be turned in at 5:35PM. Work the closed book section first and turn it in before you consult your books and notes to work on the open book section. For the closed book section, write your answers either on the exam itself or on your own paper (for the long questions).

Name: _____

Problem 1. (5 points)

Write a regular expression that will match all lines that start zero or more blanks followed by the words `if` or `then`.

Problem 2. (5 points)

C identifier names may contain only letters, digits, or underscores (`_`) and they must start with a letter or underscore. Write a regular expression that matches all lines that consist solely of a legal C identifier.

Problem 3. (5 points)

Show how to use the `find` command to list all files that are owned by user `oracle` and executable by members of the group `dba`.

Problem 4. (5 points)

Show how to use the `find` command to list all files whose names end with `.c`.

Problem 5. (2 points)

Which daemon makes sure the superblock is occasionally written to disk?

Problem 6. (3 points)

How does the system administrator specify the location of the swap device?

Problem 7. (10 points)

Write a Bourne shell script that takes a single argument n and prints $n/2$, if n is even, and $3*n+1$, if n is odd.

Problem 8. (10 points)

Recently, SRS Imaging announced a new PostScript laser printer that attaches to your computer via the SCSI interface.

What advantages, if any, would a SCSI-based laser printer have over a "conventional" laser printer attached via a serial RS-232 line? What modifications would you expect to make to your computer's hardware and software before you could `lpr` to this SCSI-based printer? (There are many. Try to name as many as you can.)

Problem 9. (5 points)

A user wants his login name changed from "buck" to "doe". How do you do this?

Problem 10. (5 points)

Your `/usr` file system is destroyed. You have the following dumps.

level 1	created on 4 July
level 0	created on 5 July
level 5	created on 6 July
level 4	created on 7 July
level 4	created on 8 July
level 7	created on 9 July

How do you restore the `/usr` file system?

Problem 11. (5 points)

Three users `moe`, `larry`, and `curly` want to have read and write access to a file called `stooge.scr`; however, they want no one else to be able to read the file. How can this be done?