CS-701 Lecture 26

May 10, 2001

Administrivia

- Final Exam will be May 22 from **6:15 to 8:15** in the regular classroom (D-133).
- Assignment 5, as much as you have completed, must be submitted by midnight on May 22 to receive any credit.
  - No INC grades will be given.
- Course grading weights (probably):

Assign 1	Assign 2	Assign 3	Assign 4	Assign 5	Exam 1	Exam 2
1	1	10	15	10	30	35

Environment List

- Problem is that the list needs to be used in two different ways:
  - When executing the *setenv* builtin command and when doing variable substitution, need to be able to manipulate name and value separately. (The parser will provide them as separate tokens; need to search for matching names.)
  - When calling *execve(),* need an array of "name=value" strings.
  - Linked list is good for the first, array of pointers is required for the second.
  - The *setenv* command should maintain both data structures. Watch out for memory leaks and dangling pointers.
- The only "shell variable" supported by *qsh* is "?", which should be handled separately from environment variables.

Escape Sequences

- Arrow keys, which are to be ignored, and the delete key, which is to be treated as backspace and rubout are, are both examples of "escape sequences."
  - *If you're delete key doesn't generate the escape sequence given in the Assignment 5 web page, you can still test your program by typing each of the characters in the sequence yourself.*
- Highly recommended but not required is to write a function that handles escape sequences in a general way. See Assignment 5 web page for more information.
  - You should know how to work with C's *enum* feature whether you write this function or not.
  - *Header file for use with recognize_escape()*
  - *Program that uses the recognize_escape() function*