UNIX Programming Assignment 6

Due date: 2016/11/22 23:59

Demo time: 2016/11/22 18:30~22:00

Demo room: EECS 328

We will write a tiny shell (tsh) command processor like sh, bash, or csh for single line commands. Your shell's main loop will display a prompt, read a line of input, and fork a child process to perform the indicated command.

Required capabilities:

- Ordinary commands, consisting of an executable program name and an optional list of arguments, run in a separate process.
- Two built-in commands: cd and pwd
- Background processing, when the last token in the command line is "&".

You should write tsh in C, using Unix system calls covered in our lectures. The main loop of your shell may look like this:

- Prints a prompt
- Reads a command line
- Parses the command line into tokens (words)
- Forks a child: loads and executes the command; // child process
- Waits for the child to terminate; // parent process
- Required error checking: Any command not found in one of the directories on \$PATH.