# Inspect the shell program [15 pts]

### 1. ps

- a. The shell command "ps" displays information about processes currently in the process table. It does so by looping over the processes in *proctab* and printing the attributes of the process using *printf*.
- b. The shell command "ps" makes no direct system calls.

### 2. kill

- a. The shell command "kill" terminates a process that is specified by the process ID passed as an argument.
- b. The shell command "kill" makes a system call to kill.

## 3. memdump

- a. The shell command "memdump" displays a region of memory when given a starting address in memory and a length (in bytes) to display.
- b. The shell command "memdump" makes no direct system calls.

### 4. cat

- a. The shell command "cat" dumps the content of files (or, input from stdin) to stdout.
- b. The shell command "cat" makes the following system calls: *open, close, getc, putc*