

Outline: System Programming

1. What are system calls?
 - a. Interface between application programs and kernel
 - b. Give information about the system
 - c. Ask the operating system to perform specific functions
2. Looking for system calls: see section 2 of the manual
3. System calls for files
 - a. *open, read, write, close*
 - b. *truncate, unlink, rmdir*
 - c. *mkdir, link, symlink*
 - d. *access, stat, readlink*
 - e. *chown, utimes*
 - f. File systems; *mount, umount*
4. System calls for information about processes
 - a. Process creation and termination: *execve, _exit*
 - b. Process IDs; *getpid, getppid*
 - c. UIDs, GIDs, EUIDs, and EGIDs; *getuid, geteuid, getgid, getegid, setuid, seteuid, setgid, setegid*
 - d. Current working directory and root directory; *chdir, chroot*
5. System calls for interprocess communication
 - a. *pipe*
 - b. How signals work; *signal*
6. System calls for system management
 - a. *acct, audit*
 - b. *reboot, shutdown*