CMPT 330 Lab1

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Lab1A Questions

1. Mystery.c ran a fork bomb on the computer. A fork bomb is a program with the sole purpose of spawning more versions of itself. It does this enough times that eventually, the computer will not function properly.

2. The man command looks up the manual for the given command. It then prints it to the console for the user to look at using a simple interface.

3. Man Page Sections

   (a) 1. Commands
   (b) 2. System Calls
   (c) 3. C Library Calls
   (d) 4. Special files (Devices)
   (e) 5. File Formats and Conventions
   (f) 6. Games
   (g) 7. Conventions and Miscellaneous
   (h) 8. System Management Commands

4. Fork creates a child process.

5. Fork resides in section 2 and 3. In section 2, the manual says that a child process is created. In section three, the manual says that a new process is created.

6. Unistd.h defines miscellaneous symbolic constants and types and declares miscellaneous functions.

7. Unistd.h resides in section 7.

8. CHILD_MAX is 7350.

Lab1B Questions

1. List Items with Sections

fork 2 3posix

waitpid 2 3posix

execve 2 3posix

exit 1posix 2 3 3posix

open 1 2 3posix

close 2 3posix

read 1posix 2 3posix

write 1 1posix 2 3posix

lseek 2 3posix

stat 1 2 3posix

mkdir 1 1posix 2 3posix

rmdir 1 1posix 2 3posix

link 1 1posix 2 3posix

ln 1 1posix

unlink 1 1posix 2 3posix

mount 2 8

umount 2 8

chdir 2 3posix

fflush 3 3posix

time 1posix 2 3posix 7

ps2pdf 1

man 1 1posix 7

threads 3ssl

kill 1 1posix 2 3posix

mkdir 1 1posix 2 3posix

chmod 1 1posix 2 3posix

chown 1 1posix 2 3posix

stdio.h 7posix

stdlib.h 7posix

mv 1 1posix

rm 1 1posix

cp 1 1posix

bash 1

sh 1 1posix

zsh 1

env 1 1posix

lpr 1

intro 1 2 3 4 5 6 7 8

wc 1 1posix

There are some from the posix guide and the default guide. This is why things like mkdir can be in manual #1 twice. A simpler list is as follows:

fork 2 3

waitpid 2 3

execve 2 3

exit 1 2 3 3

open 1 2 3

close 2 3

read 1 2 3

write 1 1 2 3

lseek 2 3

stat 1 2 3

mkdir 1 1 2 3

rmdir 1 1 2 3

link 1 1 2 3

ln 1 1

unlink 1 1 2 3

mount 2 8

umount 2 8

chdir 2 3

fflush 3 3

time 1 2 3 7

ps2pdf 1

man 1 1 7

threads 3

kill 1 1 2 3

mkdir 1 1 2 3

chmod 1 1 2 3

chown 1 1 2 3

stdio.h 7

stdlib.h 7

mv 1 1

rm 1 1	sh 1 1	lpr 1
cp 1 1	zsh 1	intro 1 2 3 4 5 6 7 8
bash 1	env 1 1	wc 1 1

2. Amount in Each Section

(a) 1. 27	(d) 4. 1	(g) 7. 5
(b) 2. 23	(e) 5. 5	
(c) 3. 23	(f) 6. 1	(h) 8. 3

3. *$>lpr rmdir\(1\).pdf* tries to print the document 'rmdir(1).pdf' file. The backslashes are in this command because (and) are special characters that are used in bash scripting.

4. Shell scripting is extremely useful when you need to automate something that would take a lot of command line work. For example, when I wipe my hard drive, it would be convenient to have an install script. This script would, once I have installed my entire operating system, go through and set up my development environment by installing all of the programs I need, and grabbing my configuration files from my GitHub.