

CS471: Operating System Concepts

Fall 2007

Homework #5

Points: 20

Due: October 19, 2007

Question 1. Write two versions of the same program: (i) Forking two processes (ii) Creating two threads executed in parallel. In each, the main program first opens the file testdata5.txt. It then forks two processes or two threads. The code executed by each thread/process is as follows: Read the next two lines from the input file (of course, check for EOF). Print the two lines along with its (process's or thread's) ID and sleep for 1 minute. This step is repeated until EOF by both of them. Then the program terminates. For simplicity, assume that each line of the file has a single integer.

Question 2. Show the commands and the output that you get to accomplish the following tasks. Use setfacl and getfacl commands.

- (a) Create a file called ACLtest.txt
- (b) Allocate read/write/execute permissions on the file to user mukka
- (c) Allocate read/write permissions on the file to the group cs471f07
- (d) In addition, allocate read permissions to the same file to the group fac
- (e) Display the ACL for the file

Question 3. Exercise 11.6

Question 4. Exercise 12.2