

National University of Computer & Emerging Sciences
Department of Computer

Science

Operating Systems Lab

Lab # 8

Instructions:

1. Make a word document with the convention "SECTION_ROLLNO _LAB-NO". In addition, paste all of your work done at the LINUX prompt.
2. You have to submit a Word File.
3. Plagiarism is strictly prohibited; negative marks would be given to students who cheat.

Tasks

1. Write a program for inter-process communication among child and parent process with following needs;
 - a. A parent and two child process.
 - b. Parent take data from the user
 - c. Send to a child for addition and subtraction.
 - d. Again take input from user and send to another child for multiplication and division.
 - e. First child process creates another child C3.
 - f. Both the children send result to the child process C3 to show output.
 - g. Parent process after completion of each child process task kill the process.
2. Write a program that creates a child process using fork (). Parent sends a message using Pipe () to the Child. The Child receives and displays the message. Hint: To allow one way communication each process should close one end of the pipe. The file Descriptors associated with a pipe can be closed with the close (fd) system call. Output should be of this form:
Parent: I am Parent I have sent message to the Child
Child: I have received this message from parent:
3. Create a simple mini chat application using Named Pipes (FIFO).