

Assignment on pipes and fifo

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Deadline: 2nd Feb (12 PM)

Marks: 20

1. Solve following task using IPC (fork, pipe or fifo)
 - a. Given a integer input array of size N, find minimum of integer array using five processes (1 Parent and 4 Children processes)
 - b. Child Process 1 should find minimum of first part of the array
 - c. Child Process 2 should find minimum of second part of the array
 - d. Child Process 3 should find minimum of third part of the array
 - e. Child Process 4 should find minimum of last part of the array
 - f. Parent process should wait for all children process to complete their execution and then collect their results. Finally print minimum of the array
2. Create two FIFOs and do the following using two processes
 - a. Process 1 should write a text message into FIFO1
 - b. Process 2 should read the text message from FIFO1 and it encrypts the text message by adding 1 to ascii value of each character of the message. And write the encrypted message to FIFO2.
 - c. If process 1 reads EXIT encrypted message from FIFO2 then process 1 exit.
else process 1 writes another message into FIFO1

Note: Don't copy codes. You can discuss about logic.

Submit your assignment (Codes, Text File: testing of code) in google form. I will share it soon.

Create a text file and write your testing outputs:

Input:

Expected Output:

Actual output: