

Assignment #2

Naoaki Takatsu

Student ID: 015746144

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Description:

use\_msgQ.cpp:

This program, referenced from the lecture slide, demonstrates how inter-process communication works using message queue and child processes. First, the parent process creates a message queue/buffer with contents of message type and message space. The parent process also creates two child processes using the fork function, each having the ability to send and receive messages using inter-process communication. While the child process executes its code, the parent process waits in a while loop for the child to finish its execution. The two child processes send and receive messages to/from each other by accessing the same message type. Once the child process finishes executing its code, it exits and returns to the parent process. Finally, when all message queue executions are finished, it terminates the message queue/buffer and exits the program.

master.cpp:

This program executes essentially the same code as the parent process does in the use\_msgQ.cpp file. The only significant difference would be that the content of the two child processes are held respectively in the receiver.cpp and sender.cpp file.

receiver.cpp:

This program will receive a message from the message buffer and display the content of the message onto the screen.

sender.cpp:

This program will send a message to the message buffer.