

Assignment 8

Title- Inter process communication using shared memory system V

Problem statement -

Application to demo client & server programs in which server process creates a shared memory segment and writes the message to the shared memory segment.

Theory -

Inter process communication through shared memory is a concept where changes made by one process can be viewed by another process.

Server reads from i/p file

server writes this data in a msg using ~~edition~~ either a pipe, fifo or message queue.

Client reads data from IPC channel

again requesting the data to be copied from Kernel's IPC buffer to the client's buffer.

System calls used -

`ftok()` - used to generate a unique key.

`shmget()` - `int shmget (key-t size, int shmflag)`

`shmat()` - Before you can use shared memory segment, you have to attach yourself to it using `shmat()`.

`shmdt()` - when you're done with the shared memory segment, your program should detach itself from it.

`shmctl()` - when you detach from shared mem it is not destroyed, to destroy it `shmctl` is used.

Conclusion -

I have successfully understood and implemented inter-process communication using shared memory.