PRESENTING A MINI PROJECT

ON "INTER PROCESS COMMUNICATION"

By CSE Department (3rd SEM)

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Introduction:

Inter process communication is a set of techniques for the exchange of data among multiple threads in one or more processes. Process may be running on one or more computers connected to the same network.

Inter process communication through shared memory is a concept where two or more processes can access the common memory. And communication is done via this shared memory where changes can be made by one process and can be seen by another process.

What is Inter Process Communication?

Inter Process Communication (IPC) is a mechanism which allows the exchange of data between the processes.

Processes that execute concurrently in the Operating system may be either independent processes or cooperating processes.

METHODS:

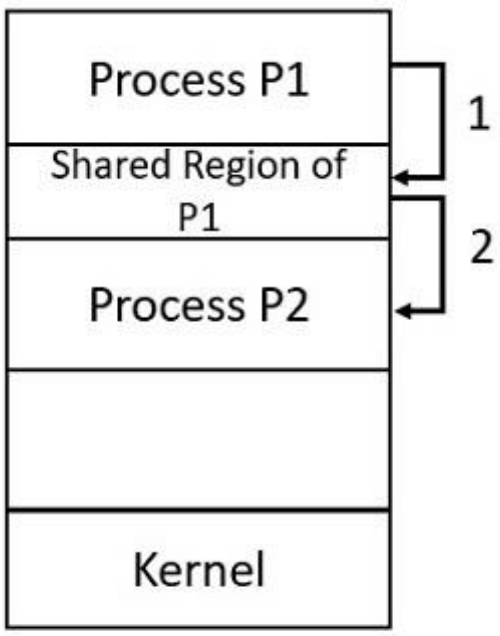
- **USING PIPES**
- **USING MESSAGE QUEUE**
- **USING FIFO, BY SHARED MEMORY**

PROCESS:

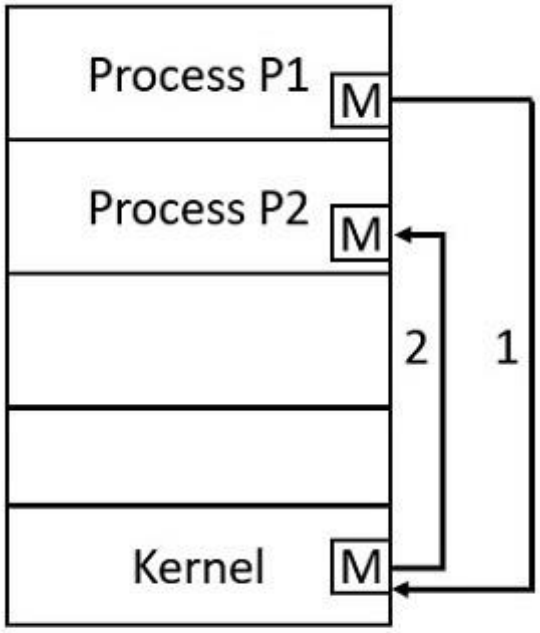
- **SERVER READS FROM THE INPUT FILE.**
- **THE SERVER WRITES THE DATA EITHER USING PIPES OR MESSAGE QUEUE, OR FIFO.**
- **THE CLIENT READS THE DATA FROM THE IPC CHANNEL, AGAIN REQUIRING THE IPCBUFFER TO THE CLIENT PROCESS.**
- **FINALLY, THE DATA IS COPIED.**

The operating system should always manage the message queue of the data which we have to input. Data should be received by another process at the same time. This whole task is carried out by the concept of shared memory.

DIAGRAMATIC REPRESENTATION



Shared Memory System



Message Passing System