Design of Sender and Receiver
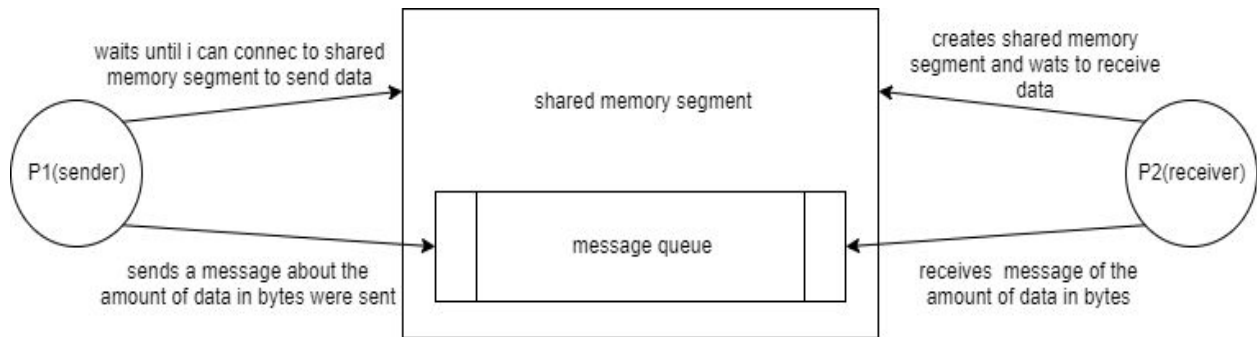

1) **Receiver process** *creates* shared memory segment and message queue

    a) Using functions from #include <sys/shm.h> to create memory address space

2) **Sender process** *connects* to shared memory segment and *sends* data

    a) Sender process also *connects* to message queue (bounded capacity) and *sends* the amount of data in bytes

3) **Receiver process** *processes* the data and *receives* the entire file

    a) Receiver process also *receives* the message of the amount of data transferred

4) Once the sender process has *sent* all of its data and receiver process has *processed* all the data OR If a user has *pressed* **CTRL + C:**

    a) A **cleanup function** is called to *deallocate* the shared memory segment and message queue, then the whole program terminates