WINDOWS IMPLEMENTATION OF ALL CLIENT-SERVER PROGRAMS

Implementation of the message queues.

```
C server_mq.c ✕    C client_mq.c

C server_mq.c > ☺ main()
  29          0.
PROBLEMS   OUTPUT   DEBUG CONSOLE   TERMINAL   PORTS

PS D:\6th\np_1> gcc client_sm.c -o client_sm           PS D:\6th\np_1> gcc server_sm.c -o server_sm
PS D:\6th\np_1> ./client_sm                            PS D:\6th\np_1> ./server_sm
Could not open file mapping object (2).                Server is waiting for data from the client...
PS D:\6th\np_1> ./client_sm                            Received data from client: 123
Enter data to send to the server: 123                  PS D:\6th\np_1> gcc server_sm.c -o server_sm
PS D:\6th\np_1> gcc client_sm.c -o client_sm           PS D:\6th\np_1> ./server_sm
PS D:\6th\np_1> ./client_sm                            Server is waiting for data from the client...
Enter data to send to the server (type 'exit' to quit): hi    Received data from client: hi
Enter data to send to the server (type 'exit' to quit): exit  PS D:\6th\np_1> gcc server_mq.c -o server_mq
PS D:\6th\np_1> gcc client_mq.c -o client_mq           PS D:\6th\np_1> ./server_mq
PS D:\6th\np_1> ./server_mq                            Server is waiting for data from the client...
Server is waiting for data from the client...          Received data from client: sathvik
PS D:\6th\np_1> ./client_mq                            Received data from client: hi
Enter data to send to the server (type 'exit' to quit): hi i am sathvik   Received data from client: i
Enter data to send to the server (type 'exit' to quit): Enter data to send to the server   Received data from client: am
(type 'exit' to quit): Enter data to send to the server (type 'exit' to quit): Enter data   Received data from client: sathvik
 to send to the server (type 'exit' to quit): hi       ▯
Enter data to send to the server (type 'exit' to quit): i
Enter data to send to the server (type 'exit' to quit): am
Enter data to send to the server (type 'exit' to quit): sathvik
Enter data to send to the server (type 'exit' to quit): ▮
```

Implementation of FIFO

```
C client_fifo.c ●    C server_fifo.c

C client_fifo.c > ☺ main()
  1    #include <windows.h>
PROBLEMS   OUTPUT   DEBUG CONSOLE   TERMINAL   PORTS

PS D:\6th\np_1> gcc client_fifo.c -o client_fifo       PS D:\6th\np_1> gcc server_fifo.c -o server_fifo
PS D:\6th\np_1> ./client_fifo                          PS D:\6th\np_1> ./server_fifo
PS D:\6th\np_1> ./client_fifo                          Received: Hello, i am sending message in fifo
PS D:\6th\np_1> ▮                                       PS D:\6th\np_1> ▯
```

Implementation of Shared Memory

```
C client_sm.c ✕    C server_sm.c

C client_sm.c > ...
  37            Sleep(1000); // Wait for the server to write data
PROBLEMS   OUTPUT   DEBUG CONSOLE   TERMINAL   PORTS

PS D:\6th\np_1> gcc client_sm.c -o client_sm           PS D:\6th\np_1> gcc server_sm.c -o server_sm
PS D:\6th\np_1> ./client_sm                            PS D:\6th\np_1> ./server_sm
Could not open file mapping object (2).                Server is waiting for data from the client...
PS D:\6th\np_1> ./client_sm                            Server: Enter data (type 'exit' to quit): hi i can share memory both sides and modify it too
Client received: hi i can share memory both sides and modify it too   ▯
Client: Enter data (type 'exit' to quit): ▮
```