

Program 1:

Build a multiplier using named pipes (aka FIFOs).

You will have a client process that does all the input and output and a server process that does the multiplies. C++ is acceptable here.

You will need **two** named pipes, one to send from the client to the server the other to server from the client.

The client process does the following 5 times (loop):

cin the multiplicand

write the multiplicand to the named pipe.

cin the multiplier

write the multiplier to the named pipe.

read back the answer from the other named pipe

Server process behavior

read the multiplicand from the named pipe

read the multiplier from the named pipe

multiply

write the answer to the other named pipe

The server process exits on control-c

The server should be started first.

`fifo.c` and `fifor.c` are available from `/net/326`.

When you are done. Remove the fifo (by hand using the `rm` command).

Program 2:

Build a multiplier using messages.

You will have a client process that does all the input and output and a server process that does the multiplies. C++ is acceptable here.

You will need two message queues, one to send from the client to the server the other to server from the client.

The client process does the following 5 times (loop):

cin the multiplicand

write the multiplicand to the message queue.

cin the multiplier

write the multiplier to the message queue.

read back the answer from the other message queue

Server process behavior

read the multiplicand from the message queue

read the multiplier from the message queue

multiply

write the answer to the other message queue

The server process exits on control-c

`sndmes.c` and `rcvmes.c` are available.

Demo: Your fifo and message programs.