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| CODE |

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\*File : p10.cpp

\*Description : Implement program 9 using as message queues or FIFOs as IPC channels.

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\*Tools : Ubuntu 13.04, gcc 4.7.3 compiler, Code::Blocks

\*Date : 25 October 2013

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//client

#include <stdio.h>

#include <fcntl.h>

int main() {

char fname[50], buffer[1025];

int request, response, n;

request = open("request.fifo", O\_WRONLY);

response = open("response.fifo", O\_RDONLY);

printf("Enter a filename to request: ");

scanf("%s", fname);

write(request, fname, sizeof(fname), 0);

printf("Received response: \n");

while((n = read(response, buffer, sizeof(buffer), 0)) > 0) {

write(1, buffer, n);

}

close(request);

close(response);

return 0;

}

//server

#include <stdio.h>

#include <fcntl.h>

int main() {

char fname[50], buffer[1025];

int request, response, file, n;

mkfifo("request.fifo", 0777);

mkfifo("response.fifo", 0777);

printf("Waiting for request... \n");

request = open("request.fifo", O\_RDONLY);

response = open("response.fifo", O\_WRONLY);

read(request, fname, sizeof(fname), 0);

printf("Received request for %s \n", fname);

file = open(fname, O\_RDONLY);

if(file < 0) {

write(response, "File not found. \n", 18, 0);

} else {

while((n = read(file, buffer, sizeof(buffer), 0)) > 0) {

write(response, buffer, n, 0);

}

}

printf("Response sent. \n");

close(request);

close(response);

unlink("request.fifo");

unlink("response.fifo");

return 0;

}

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| **OUTPUT** |



