Computing Homework 04/03/14

Objective

Write two programs, a client program and a server program, that will exchange files. First, the client will ask the user what file he would like, assuming a connection was found between the client and the server, and ask the server for that file. The server will send the contents of the file to the client, who will then print them for the user to read.

How to do it

I will have 1 function that I will use to achieve the objective:

- read_and_send_file(char filename, int connection)
    - This will be used by the server to read a file (specified by the filename var) and will output the contents to the client.

When the client connects to the parent and asks for a file, the server will then use read_and_send_file() to get the contents and will send these to the client.

How to test it

I will test this program by first inputting 'cat file.txt' and then 'echo 'file.txt' l./client.out' while the server is running. If the output for the client program and the cat statement are the same for all the files (file.txt,file2.txt,file3.txt,file4.txt,file5.txt), then I will conclude that I have succeeded.

Test results

After testing my program, I got these results:

```
$ cat file.txt
FILE1
$ echo 'file.txt'|./client.out
What file should I get?:
FILE1

$ cat file2.txt
I AM FILE DOS.
$ echo 'file2.txt'|./client.out
What file should I get?:
I AM FILE DOS.

$ cat file3.txt
There are
5
files. I am the third.
$ echo 'file3.txt'|./client.out
What file should I get?:
There are
5
files. I am the third.

$ cat file4.txt
I am number
FOUR.
$ echo 'file4.txt'|./client.out
What file should I get?:
I am number
FOUR.

pi@raspberrypi ~/Desktop/GCSE-Computing/ComputingHomework14_03_04 $ cat
file5.txt
```

```
This is the final file, or file 5.
pi@raspberrypi ~/Desktop/GCSE-Computing/ComputingHomework14_03_04 $ echo
'file5.txt'|./client.out
What file should I get?:
This is the final file, or file 5.
```

As you can see, the only differences between the cat statement and the one that used the client was the 'What file should I get:' text.
I can therefore conclude that I have completed the objective.