

Lab Exercise

■ Make a *file transfer service*

- The server runs in the background by attaching ‘&’ when running
- The client runs in the foreground and is shown on the screen
- This client should be under an infinite loop with **conditional exit** (“exit”)
- When the name of the file is entered, the client reads the file and sends it to the server
- The server saves the file name received from the client by appending “_copy”
- The file is a text file and does not have an extension
 - » ex) a.txt(X), b.exe(X), c.c(X) , Aladdin(O), a(O), b(O)
- The size of file is smaller than 200,000 bytes
- The length of file name is shorter than 50 bytes.

Lab Exercise

■ Example)

```
spl on ● SPL in 2023f/week11/p11 via C v13.2.0-gcc
└─ ls
Aladdin      client*  Makefile  server.c  text_copy
Aladdin_copy client.c  server*   text

spl on ● SPL in 2023f/week11/p11 via C v13.2.0-gcc
└─ cat text
This is a text file
to test this week's exercise!

spl on ● SPL in 2023f/week11/p11 via C v13.2.0-gcc
└─ ./client localhost 1398
File Name: text
Sending text...
Sent 49 bytes.
File Name: Aladdin
Sending Aladdin...
Sent 109511 bytes.
File Name: quit

spl on ● SPL in 2023f/week11/p11 via C v13.2.0-gcc took 8s
└─
```

```
spl on ● SPL in 2023f/week11/p11 via C v13.2.0-gcc
└─ ./server 1398
File Name: text
Received 49 bytes.
File Name: Aladdin
Received 109511 bytes.
^C

spl on ● SPL in 2023f/week11/p11 via C v13.2.0-gcc took 19s
!! stat text -c "%n: %s bytes"
text: 49 bytes

spl on ● SPL in 2023f/week11/p11 via C v13.2.0-gcc
└─ stat Aladdin -c "%n: %s bytes"
Aladdin: 109511 bytes

spl on ● SPL in 2023f/week11/p11 via C v13.2.0-gcc
└─
```

Exercise Submission

- **Submit your source code and Makefile**
 - via iCampus
 - Bundle **source code** and **Makefile** with tar command
 - » *tar.gz* format
 - \$ tar cvzf** *[student_id].tar.gz [all your files]*
 - We'll grade your submission with **make**
 - » If compilation fails, your points for this exercise will be zero