

## COIS 3380H – Systems Programming in C

### LAB -6 Explanations (Vishal Singh)

#### 1) FILE TYPE 1

SERVER SIDE with MD5SUM: (lab4\_sourcefile)

```
[vishalsingh@loki lab6]$ ./server
Server program STARTED
Communication FIFOs created
Waiting for client...
FIFOs opened successfully
Received filename from client: /home/COIS/3380/lab4_sourcefile
File opened successfully for writing
Received 1024 bytes from client and written to file
Received 897 bytes from client and written to file
Acknowledgment sent to client
Server program finished
[vishalsingh@loki lab6]$ ls
client  client.c  lab6_sourcefile_local_clone  server  server.c
[vishalsingh@loki lab6]$ md5sum /home/COIS/3380/lab4_sourcefile
9fd8213663918961f962f192c7b4d1f0  /home/COIS/3380/lab4_sourcefile
[vishalsingh@loki lab6]$ md5sum lab6_sourcefile_local_clone
9fd8213663918961f962f192c7b4d1f0  lab6_sourcefile_local_clone
[vishalsingh@loki lab6]$ ./server
```

CLIENT SIDE: (lab4\_sourcefile)

```
[vishalsingh@loki lab6]$ ./client /home/COIS/3380/lab4_sourcefile
Client program started
Communication FIFOs found
FIFOs opened successfully
Filename sent to the server: /home/COIS/3380/lab4_sourcefile
File opened successfully
Sent 1024 bytes to server
Sent 897 bytes to server
End of file sent
Server response: All DONE
Client program finished
[vishalsingh@loki lab6]$ ./client /home/COIS/3380/lab3/arasaurolopus_baby.pdf
```

#### 2) FILE TYPE 2:

SERVER SIDE WITH MD5SUM (PDF)

```
[vishalsingh@loki lab6]$ ./server
Server program STARTED
Communication FIFOs created
Waiting for client...
FIFOs opened successfully
Received filename from client: /home/COIS/3380/lab3/arasaurolopus_baby.pdf
File opened successfully for writing
Received 1024 bytes from client and written to file
Received 1024 bytes from client and written to file
Received 1024 bytes from client and written to file
Received 1024 bytes from client and written to file
Received 1024 bytes from client and written to file
Received 1024 bytes from client and written to file
Received 1024 bytes from client and written to file
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Received 1024 bytes from client and written to file
Received 1024 bytes from client and written to file
Received 1024 bytes from client and written to file
Received 1024 bytes from client and written to file
Received 1024 bytes from client and written to file
Received 1024 bytes from client and written to file
Received 195 bytes from client and written to file
Acknowledgment sent to client
Server program finished
[vishalsingh@loki lab6]$ md5sum lab6_sourcefile_local_clone
8145704e80855b3f7d570361053784f9  lab6_sourcefile_local_clone
[vishalsingh@loki lab6]$ md5sum /home/COIS/3380/lab3/arasaurolopus_baby.pdf
8145704e80855b3f7d570361053784f9  /home/COIS/3380/lab3/arasaurolopus_baby.pdf
[vishalsingh@loki lab6]$ ./server
```

CLIENT SIDE:



```

Client program finished
[vishalsingh@loki lab6]$ ./client /home/COIS/3380/play_data/Olympic_results/noc_regions.csv
Client program started
Communication FIFOs found
FIFOs opened successfully
Filename sent to the server: /home/COIS/3380/play_data/Olympic_results/noc_regions.csv
File opened successfully
Sent 1024 bytes to server
Sent 1024 bytes to server
Sent 1024 bytes to server
Sent 523 bytes to server
End of file sent
Server response: All DONE
Client program finished

```

#### 4. FILE TYPE 4(TXT)

SERVER SIDE WITH MD5SUM:

```

[vishalsingh@loki lab6]$ ./server
Server program STARTED
Communication FIFOs created
Waiting for client...
FIFOs opened successfully
Received filename from client: /home/COIS/3380/lab3/lab2_textfile.txt
File opened successfully for writing
Received 616 bytes from client and written to file
Acknowledgment sent to client
Server program finished
[vishalsingh@loki lab6]$ md5sum lab6_sourcefile_local_clone
414c7f0d9ee9513bbcd9a93a3097a2031  lab6_sourcefile_local_clone
[vishalsingh@loki lab6]$ md5sum /home/COIS/3380/lab3/lab2_textfile.txt
414c7f0d9ee9513bbcd9a93a3097a2031  /home/COIS/3380/lab3/lab2_textfile.txt
[vishalsingh@loki lab6]$ ./server

```

CLIENT SIDE:

```


[vishalsingh@loki lab6]$ ./client /home/COIS/3380/lab3/lab2_textfile.txt
Client program started
Communication FIFOs found
FIFOs opened successfully
Filename sent to the server: /home/COIS/3380/lab3/lab2_textfile.txt
File opened successfully
Sent 616 bytes to server
End of file sent
Server response: All DONE
Client program finished
[vishalsingh@loki lab6]$ ./client /home/COIS/3380/lab3/jewel.jpg
Client program started

```

#### 5. FILE TYPE 5 (JPG)

SERVER SIDE WITH MD5SUM:

```
[vishal Singh@loki lab6]$ ./server
Server program STARTED
Communication FIFOs created
Waiting for client...
FIFOs opened successfully
Received filename from client: /home/COIS/3380/lab3/jewel.jpg
File opened successfully for writing
Received 1024 bytes from client and written to file
Received 1024 bytes from client and written to file
Received 1024 bytes from client and written to file
Received 1024 bytes from client and written to file
Received 1024 bytes from client and written to file
Received 1024 bytes from client and written to file
Received 1024 bytes from client and written to file
Received 1024 bytes from client and written to file
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Received 1024 bytes from client and written to file
Received 1024 bytes from client and written to file
Received 1024 bytes from client and written to file
Received 1024 bytes from client and written to file
Received 1024 bytes from client and written to file
```

The bottom portion of the screenshot shows the Windows operating system's taskbar. On the left is the Start button (Windows logo). Next to it is a search bar containing the placeholder text "Type here to search". To the right of the search bar are several pinned application icons: the Task View icon (four squares), Microsoft Edge browser (blue circle with wave), File Explorer (yellow folder), another Task View icon, OneDrive (red cloud), and a partially visible icon for a red application with a white letter 'E'. The background behind the taskbar is dark grey.

```
[vishalsingh@loki lab6]$ md5sum lab6_sourcefile_local_clone
8f87ca8a026c94d8d457794f3e07da3a  lab6_sourcefile_local_clone
[vishalsingh@loki lab6]$ md5sum /home/COIS/3380/lab3/jewel.jpg
8f87ca8a026c94d8d457794f3e07da3a  /home/COIS/3380/lab3/jewel.jpg
[vishalsingh@loki lab6]$ ^C
[vishalsingh@loki lab6]$ ls
client client.c lab6_sourcefile_local_clone server server.c
[vishalsingh@loki lab6]$
```

CLIENT SIDE:

[illegible]

```
Sent 1024 bytes to server  
Sent 1024 bytes to server  
Sent 1024 bytes to server  
Sent 1024 bytes to server  
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Sent 1024 bytes to server  
Sent 1024 bytes to server  
Sent 1024 bytes to server  
Sent 1024 bytes to server  
Sent 1024 bytes to server  
Sent 1024 bytes to server  
Sent 1024 bytes to server  
Sent 1024 bytes to server  
Sent 1024 bytes to server  
Sent 1024 bytes to server  
Sent 823 bytes to server  
End of file sent  
Server response: All DONE  
Client program finished
```