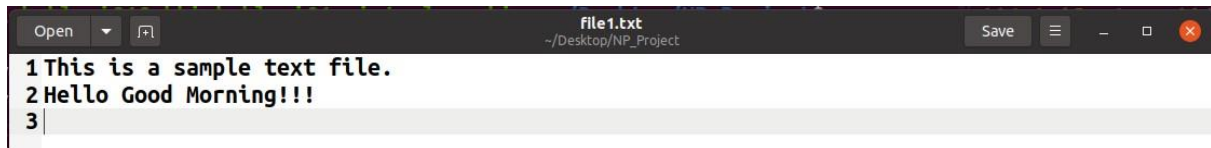


Output: -

✚ Server containing files as file1.txt and file2.txt

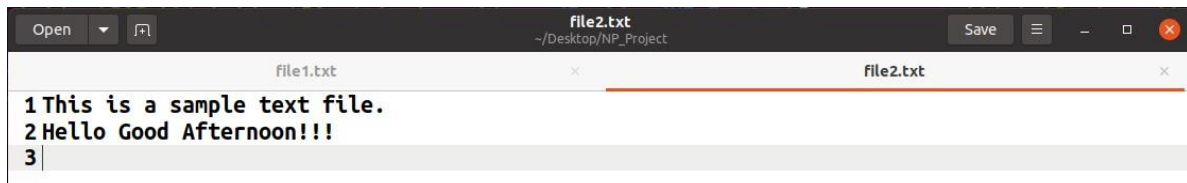
○ File1.txt



A screenshot of a text editor window titled "file1.txt" with the path "~/Desktop/NP_Project". The window contains two lines of text: "1 This is a sample text file." and "2 Hello Good Morning!!!". The cursor is on the third line, which is currently empty.

```
1 This is a sample text file.  
2 Hello Good Morning!!!  
3
```

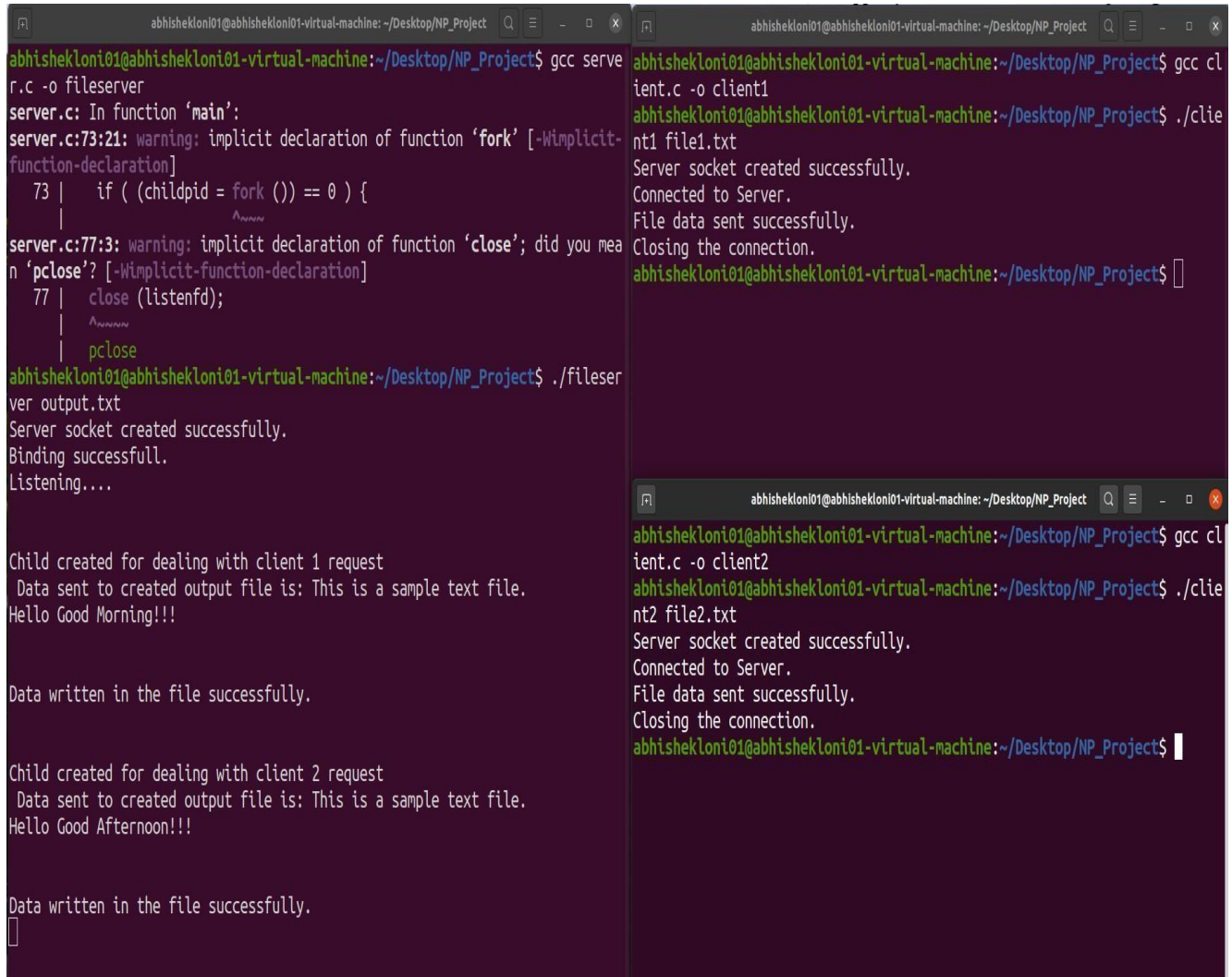
○ File2.txt



A screenshot of a text editor window titled "file2.txt" with the path "~/Desktop/NP_Project". The window contains two lines of text: "1 This is a sample text file." and "2 Hello Good Afternoon!!!". The cursor is on the third line, which is currently empty.

```
1 This is a sample text file.  
2 Hello Good Afternoon!!!  
3
```

File Server and Two Clients(client1 and client2) execution.



The screenshot displays three terminal windows from a virtual machine. The leftmost window shows the compilation and execution of a file server program. It includes compiler warnings about implicit declarations for 'fork' and 'close', and messages indicating successful socket creation, binding, and listening. It then shows two client requests: Client 1 sends 'Hello Good Morning!!!' and Client 2 sends 'Hello Good Afternoon!!!'. Both messages are confirmed to be written to 'output.txt'. The middle and right windows show the compilation and execution of two client programs, 'client1' and 'client2' respectively. Each client successfully connects to the server and sends a file (file1.txt and file2.txt), with messages confirming the successful connection and data transfer.

```
abhishekloni01@abhishekloni01-virtual-machine: ~/Desktop/NP_Project
gcc server.c -o fileserver
server.c: In function 'main':
server.c:73:21: warning: implicit declaration of function 'fork' [-Wimplicit-function-declaration]
   73 |     if ( (childpid = fork ()) == 0 ) {
       |                     ^~~~~
server.c:77:3: warning: implicit declaration of function 'close'; did you mean 'pclose'? [-Wimplicit-function-declaration]
   77 |     close (listenfd);
       |     ^~~~~~
   77 |     pclose
abhishekloni01@abhishekloni01-virtual-machine:~/Desktop/NP_Project$ ./fileserver
Server socket created successfully.
Binding successfull.
Listening....

Child created for dealing with client 1 request
Data sent to created output file is: This is a sample text file.
Hello Good Morning!!!

Data written in the file successfully.

Child created for dealing with client 2 request
Data sent to created output file is: This is a sample text file.
Hello Good Afternoon!!!

Data written in the file successfully.
[]

abhishekloni01@abhishekloni01-virtual-machine:~/Desktop/NP_Project$ gcc client.c -o client1
abhishekloni01@abhishekloni01-virtual-machine:~/Desktop/NP_Project$ ./client1 file1.txt
Server socket created successfully.
Connected to Server.
File data sent successfully.
Closing the connection.
abhishekloni01@abhishekloni01-virtual-machine:~/Desktop/NP_Project$ []

abhishekloni01@abhishekloni01-virtual-machine:~/Desktop/NP_Project$ gcc client.c -o client2
abhishekloni01@abhishekloni01-virtual-machine:~/Desktop/NP_Project$ ./client2 file2.txt
Server socket created successfully.
Connected to Server.
File data sent successfully.
Closing the connection.
abhishekloni01@abhishekloni01-virtual-machine:~/Desktop/NP_Project$ []
```

✚ **Client1 appends its message into output.txt file from Server.**



The screenshot shows a text editor window titled '*output.txt' with the following content:

```
1 This is a sample text file.
2 Hello Good Morning!!!
3
```

Client2 appends its message into output.txt file from Server.



```
*output.txt
~/Desktop/NP_Project
Save

1 This is a sample text file.
2 Hello Good Morning!!!
3
4 This is a sample text file.
5 Hello Good Afternoon!!!
6
```