

WELCOME TO THE “Local-Chat SW” MANUEL :

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1-features of the program :

+the “local-chat SW” offers you a local chat service , which you can send and receive messages as a client/server .

+you can send multiple messages without any interruption .

+you are connected to the server using the machine IP (127.0.0.1) and a port given by the server side (exp : 9999) .

+for exiting the program , closing the terminal is enough for terminating the process .

+providing the machine IP and the port number is crucial for the execution of the program.

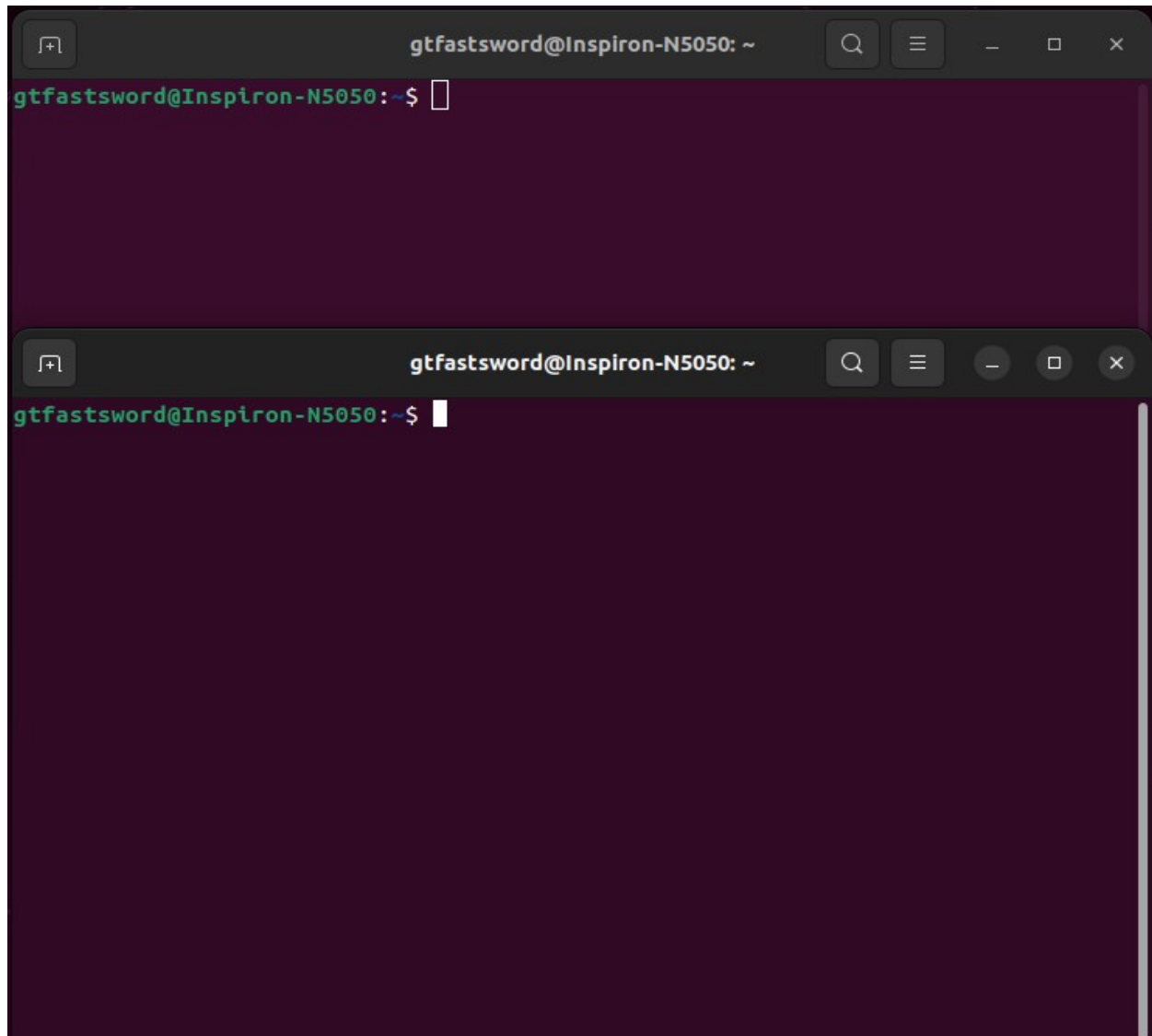
+this program works in a “Linux” environment.

2-how to launch the program using terminal commands :

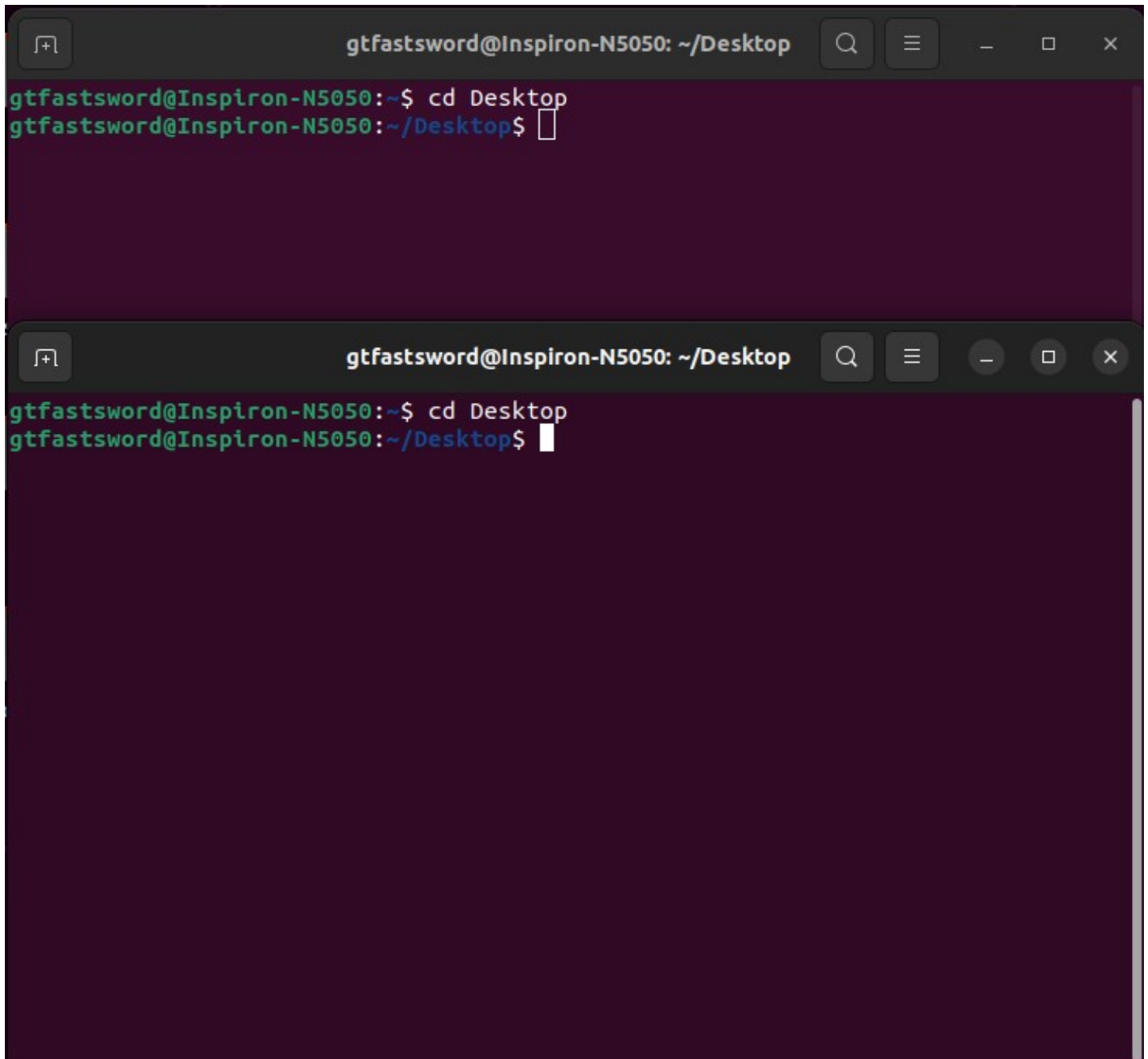
the zip file contain 2 “.c files and 2 compiled files of the program .

///-using the “code-name”.c method :

1- run 2 separated terminal windows :



2-navigate to the extracted zip file directory using “ cd “ command :



The image displays two terminal window screenshots. The top window shows the command 'cd Desktop' being entered and executed, with the prompt changing from '~\$' to '~/Desktop\$'. The bottom window shows the same command being entered and executed, with the prompt changing from '~\$' to '~/Desktop\$'.

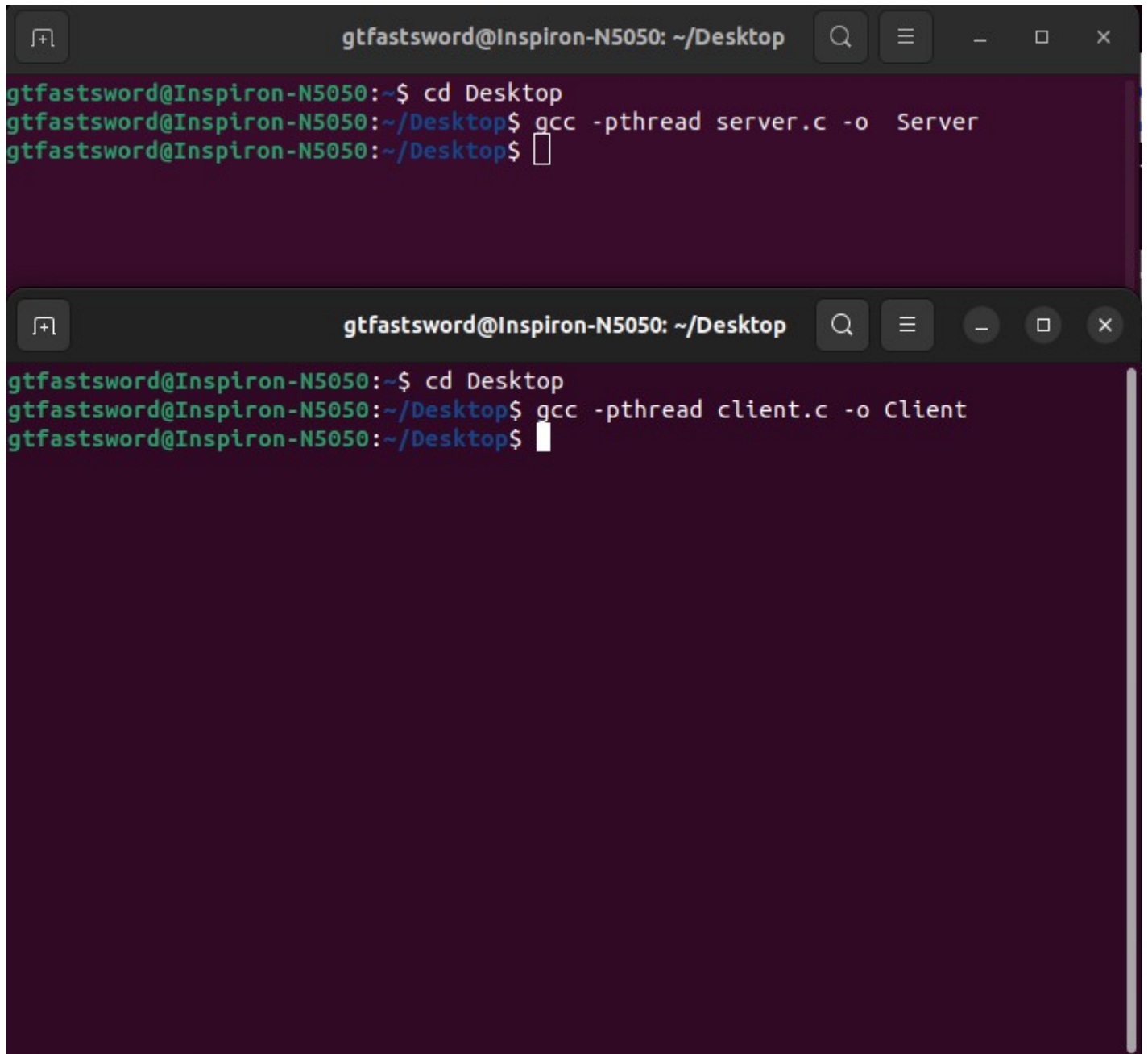
```
gtfastsword@Inspiron-N5050: ~/Desktop
gtfastsword@Inspiron-N5050:~$ cd Desktop
gtfastsword@Inspiron-N5050:~/Desktop$

gtfastsword@Inspiron-N5050: ~/Desktop
gtfastsword@Inspiron-N5050:~$ cd Desktop
gtfastsword@Inspiron-N5050:~/Desktop$
```

3-compile the “code-name”.c file using the following command :

for the server : “gcc -pthread server.c -o Server”

for the client : “gcc -pthread client.c -o Client”



The image displays two terminal windows from a Linux system. The top window shows the user 'gtfastsword' at 'Inspiron-N5050' in the directory '~/Desktop'. The user enters 'cd Desktop' and then 'gcc -pthread server.c -o Server', followed by a blank prompt. The bottom window shows the same user and machine, with the user entering 'cd Desktop' and then 'gcc -pthread client.c -o Client', followed by a blank prompt. Both windows have a dark purple background and standard terminal window controls at the top.

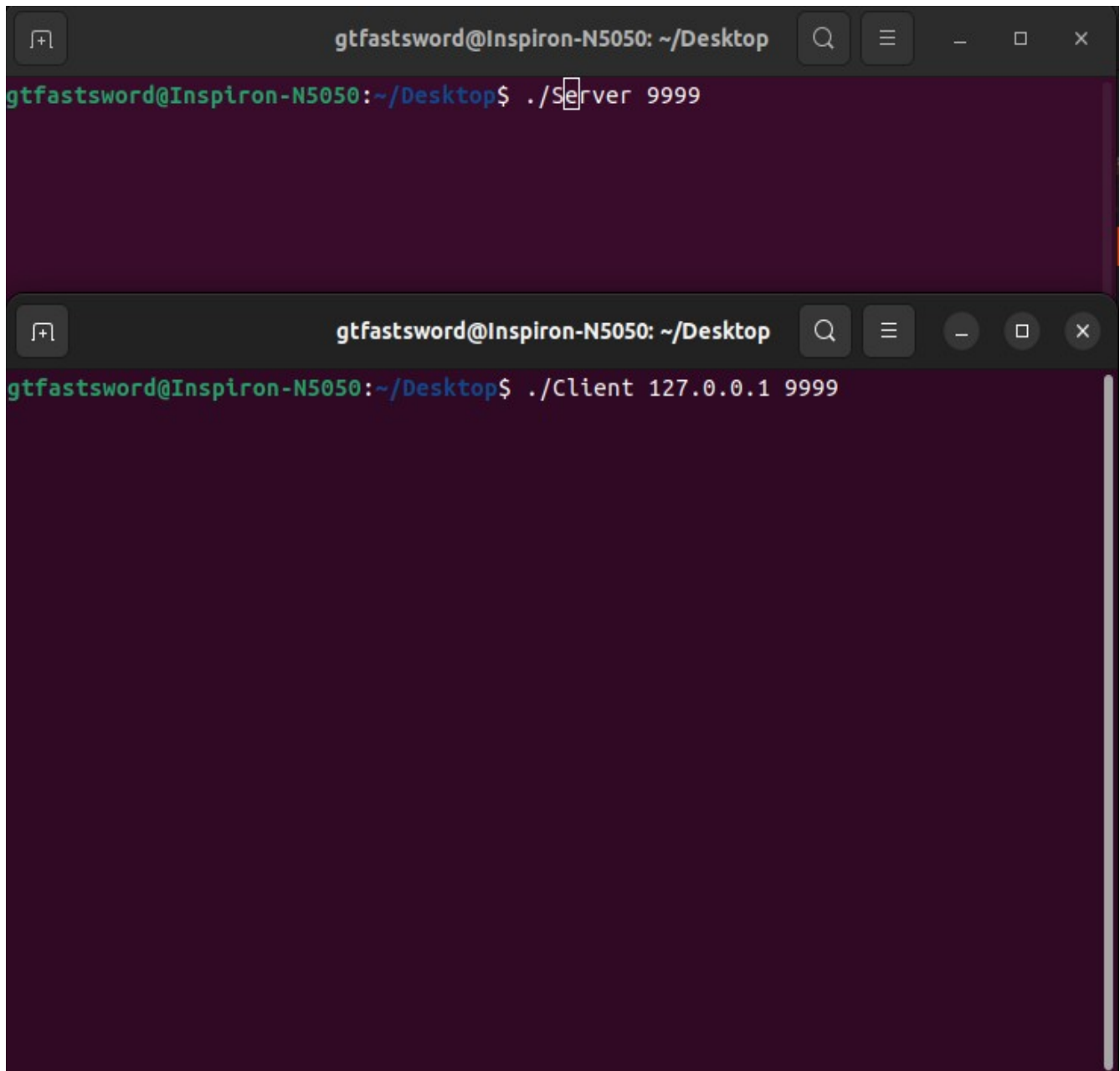
```
gtfastsword@Inspiron-N5050: ~/Desktop
gtfastsword@Inspiron-N5050:~$ cd Desktop
gtfastsword@Inspiron-N5050:~/Desktop$ gcc -pthread server.c -o Server
gtfastsword@Inspiron-N5050:~/Desktop$

gtfastsword@Inspiron-N5050: ~/Desktop
gtfastsword@Inspiron-N5050:~$ cd Desktop
gtfastsword@Inspiron-N5050:~/Desktop$ gcc -pthread client.c -o Client
gtfastsword@Inspiron-N5050:~/Desktop$
```

4-execute the compiled version of the Server/Client using this following command :

for the server : “./Server “port-number(exp:9999)”

for the client : “./Client 127.0.0.1 “port-number(exp:9999)”
(the port in the server and client should be the same)

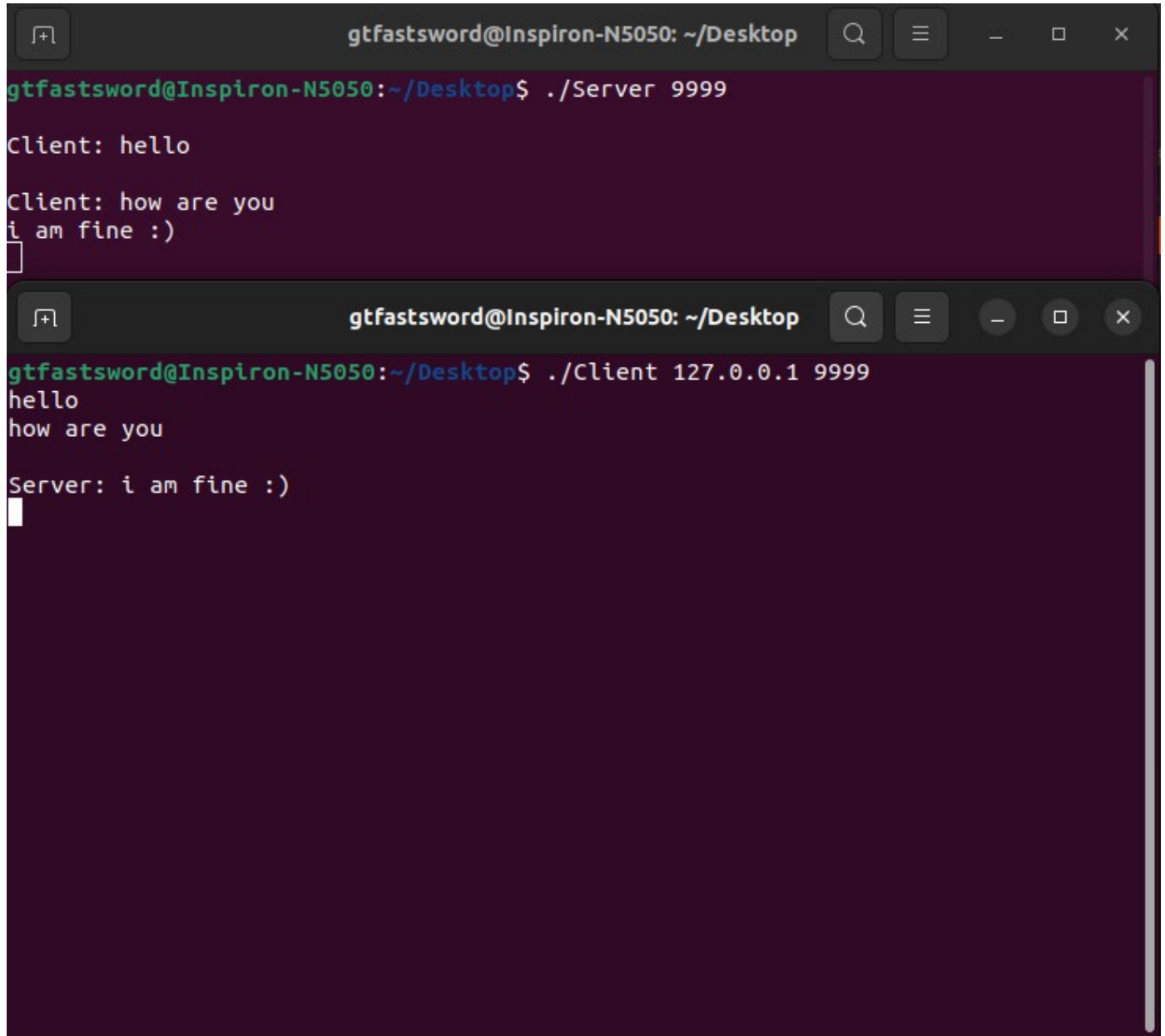


The image displays two terminal windows from a Linux environment. The top window shows the command `./Server 9999` being entered at the prompt `gtfastsword@Inspiron-N5050: ~/Desktop`. The bottom window shows the command `./Client 127.0.0.1 9999` being entered at the same prompt. Both windows have a dark background and standard terminal window controls (minimize, maximize, close) in the title bar.

```
gtfastsword@Inspiron-N5050: ~/Desktop
gtfastsword@Inspiron-N5050:~/Desktop$ ./Server 9999

gtfastsword@Inspiron-N5050: ~/Desktop
gtfastsword@Inspiron-N5050:~/Desktop$ ./Client 127.0.0.1 9999
```

5-enjoy chatting with yourself !:



The image shows two terminal windows stacked vertically. Both windows have a title bar with the text 'gtfastsword@Inspiron-N5050: ~/Desktop' and standard window controls (search, menu, zoom, close). The top window shows the execution of './Server 9999'. It receives two messages from a client: 'hello' and 'how are you'. The bottom window shows the execution of './Client 127.0.0.1 9999'. It sends 'hello' and 'how are you' to the server, and receives the response 'Server: i am fine :)'. The terminal background is dark purple.

```
gtfastsword@Inspiron-N5050: ~/Desktop
gtfastsword@Inspiron-N5050:~/Desktop$ ./Server 9999
Client: hello
Client: how are you
i am fine :)

gtfastsword@Inspiron-N5050: ~/Desktop
gtfastsword@Inspiron-N5050:~/Desktop$ ./Client 127.0.0.1 9999
hello
how are you
Server: i am fine :)

```


///-using the compiled version :

1-simply repeat step 1,2,4,5 .