# **Test Documentation file for Client-Server FTP project**

#Overview

This Project is implemented using C++ programming language, it has two folders named Client\_prg and Server\_prg where all client and server related cpp files and makefiles are stored respectively.

//To run Server

Type make

./iftp\_server -sr <protocol> <ip> <port>

//To run Client

./iftp\_client -cl <protocol> <ip> <port>

//After connecting to server client will be allowed to enter basic commands related to file operations like  
  
-ls  
-read  
-create

-rm

-cp

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Testcase no | Role | Command | Description | Input | Expected Output |
| Test-C1 | Server | -sr | Calls Server side main function | <protocol>  <ip> <port> | Server should run |
| Test-C2 | Server | -tcp | Calls Server main function with TCP protocol | <ip> <port> | TCPServer must run |
| Test-C3 | Client | -cl | Calls Client side main function | <protocol>  <ip> <port> | Client should run |
| Test-C4 | Client | -tcp | Calls Client main function with TCP protocol | <ip> <port> | TCPClient must run |
| Test-C5 | Client | -ls <dir> | Lists all the files within the provided path | Dirpath | Must list all the files in specified directory |
| Test-C6 | Client | -ls <dir> | Lists all the files within the provided path | -ls /root | Permission Denied |
| Test-C7 | Client | -ls <dir> | Lists all the files within the provided path | -ls <not a directory> | File not found. |
| Test-C8 | Client | -rm <filename> | Removes the specified file | -rm <valid filename> | File removed successfully. |
| Test-C9 | Client | -rm <filename> | Removes the specified file | -rm <invalid filename> | Failed to remove file. |
| Test-C10 | Client | -read <filename> | Reads the content inside the file | -read <filename> | Must read the content inside the file |
| Test-C11 | Client | -read <filename> | Reads the content inside the file | -read <invalid filename> | File not found. |
| Test-C12 | Client | -cp | Copies content of one file to another | -cp <src filepath> <dest filepath> | File copied successfully |
| Test-C13 | Client | -create | A File will be created in the specified path | -create <filepath> | File created successfully |
| Test-C14 | Client | -create | If file already exists with same file name | -create  <filepath> | Error File already Exists |
| Test-C15 | Client | -write | To write content inside a file | -write <filename>  <content> | Content written Successfully. |
| Test-C16 | Client | -rename | To rename a file | -rename  <old\_filename>  <new\_filename> | File Renamed Successfully. |
| Test-C17 | Server | -sr -tcp <ip> <port> | Assigns that ip and port to the server | <ip> <port> | TCP Server running on <ip>:<port> |
| Test-C18 | Server | -sr -tcp <ip> <port> | if port is in use already | - | Error binding socket. |
| Test-C19 | Client | -cl -tcp <ip>  <port> | Connecting to respective server | - | “Connected to Server on port <port>” |
| Test- C20 | Client | exit | Client gets disconnected | - | Client should be Disconnected |
| |  | | --- | | **Test-C21** | | |  | | --- | | Client | | -cp | Copy file to invalid path | -cp  <src\_filepath>  <dest\_filepath> | Destination path not found |
| Test-C22 | Client | -write | Write to non-existent file | -write missing.txt "hello" | File not found |
| Test-C23 | Client | -create | Create file in restricted directory | -create /root/file.txt | Permission denied |
| Test-C24 | Client | -cp | Copy from and to the same file | -cp file.txt file.txt | Source and destination are same. |
| Test-C25 | |  | | --- | | Client |  |  | | --- | |  |  |  | | --- | |  |  |  | | --- | |  | | |  | | --- | | -write | | Write empty string | -write file.txt "" | Empty content written successfully |

|  |  |
| --- | --- |
| Test Case Number | Status |
| Test-C1 | PASS |
| Test-C2 | PASS |
| Test-C3 | PASS |
| Test-C4 | PASS |
| Test-C5 | PASS |
| Test-C6 | PASS |
| Test-C7 | PASS |
| Test-C8 | PASS |
| Test-C9 | PASS |
| Test-C10 | PASS |
| Test-C11 | PASS |
| Test-C12 | PASS |
| Test-C13 | PASS |
| Test-C14 | FAIL |
| Test-C15 | FAIL |
| Test-C16 | FAIL |
| Test-C17 | PASS |
| Test-C18 | PASS |
| Test-C19 | FAIL |
| Test-C20 | PASS |
| Test-C21 | FAIL |
| Test-C22 | FAIL |
| Test-C23 | FAIL |
| Test-C24 | FAIL |
| Test-C25 | FAIL |