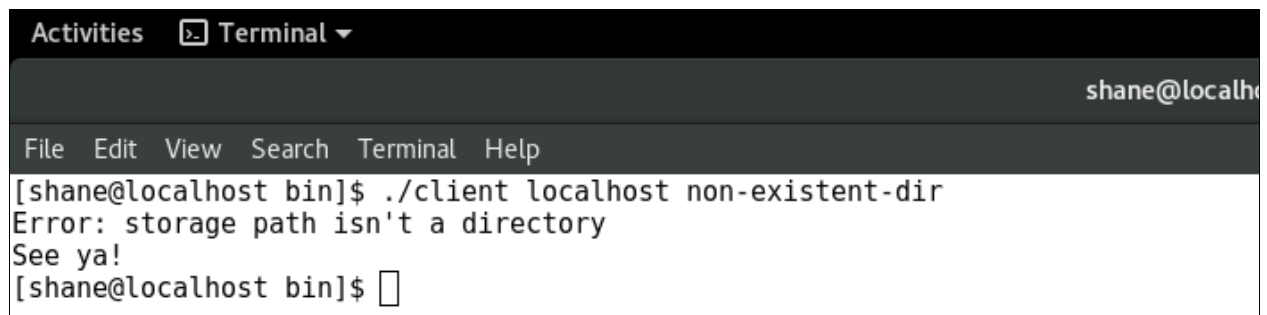


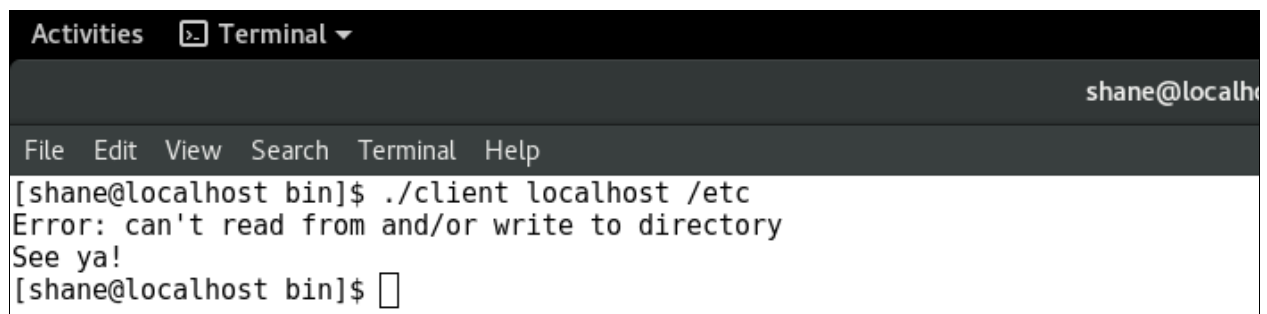
Client Tests

Test Number	Description	Tools Used	Expected Outcome	Result
C1	Client is given invalid directory	client	Client displays error message and exits	Passed (Figure 1)
C2	Client is given directory with no read and/or write privileges	client	Client displays error message and exits	Passed (Figure 2)
C3	Client can't connect to server	client	Client displays error message and exits	Passed (Figure 3)
C4	Incorrect command is entered on client	client	Client displays command syntax and waits for next command	Passed (Figure 4)
C5	User enters SEND command for existing file	client, server	Client sends file to server	Passed (Figure 5)
C6	User enters SEND command for non-existent file	client	Client displays error message and waits for next command	Passed (Figure 6)
C7	User enters GET command for file that exists on server	client, server	Client retrieves file	Passed (Figure 7)
C8	User enters GET command for file that doesn't exist on server	client, server	Client displays returned server error message	Passed (Figure 8)
C9	User types Ctrl + D	client	Client exits	Passed (Figure 9)



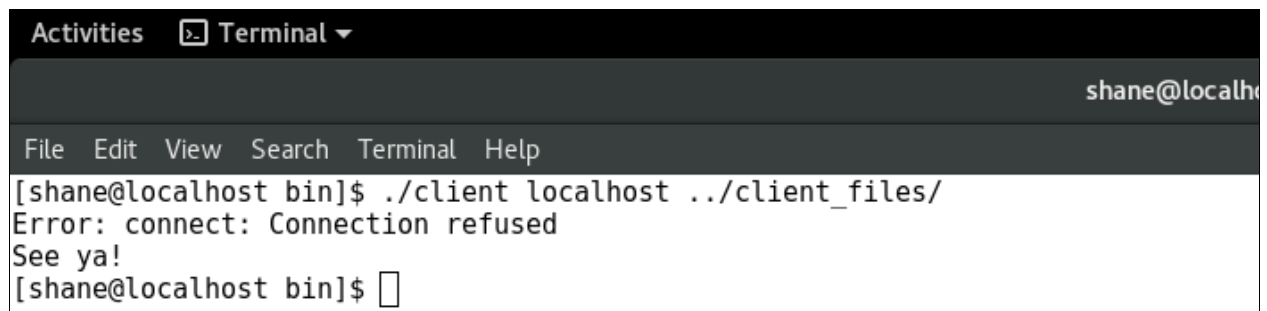
```
Activities  Terminal ▾
shane@localhost
File Edit View Search Terminal Help
[shane@localhost bin]$ ./client localhost non-existent-dir
Error: storage path isn't a directory
See ya!
[shane@localhost bin]$
```

Figure 1: Client is given invalid directory



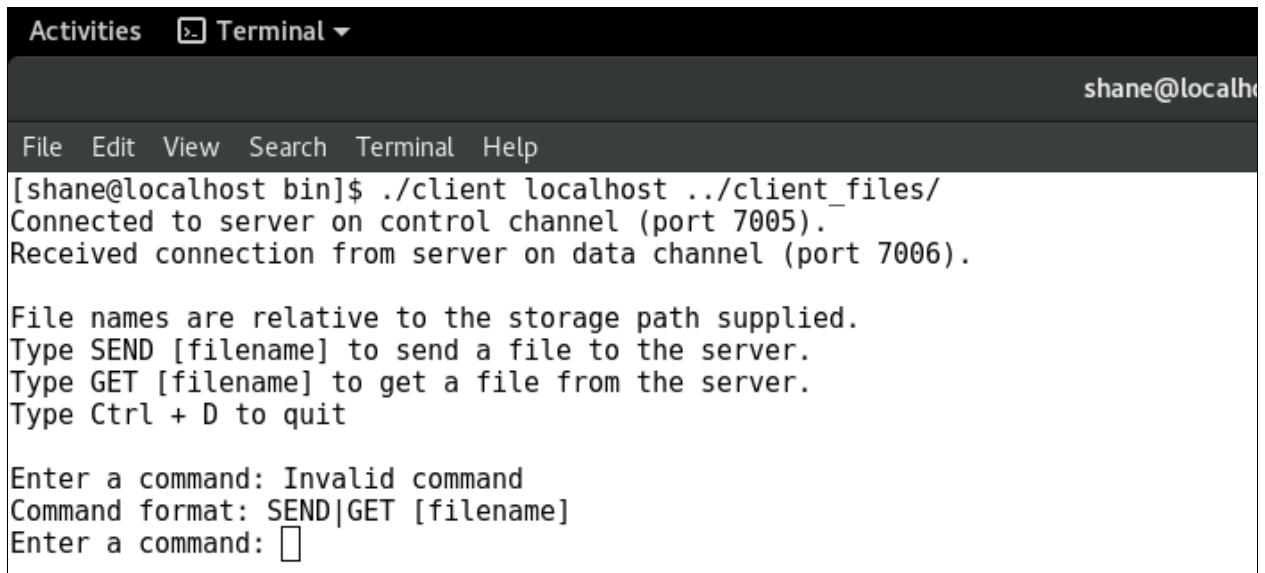
```
Activities  Terminal ▾
shane@localhost
File Edit View Search Terminal Help
[shane@localhost bin]$ ./client localhost /etc
Error: can't read from and/or write to directory
See ya!
[shane@localhost bin]$
```

Figure 2: Client is given directory with no read and/or write privileges



```
Activities  Terminal ▾
shane@localhost
File Edit View Search Terminal Help
[shane@localhost bin]$ ./client localhost ../client_files/
Error: connect: Connection refused
See ya!
[shane@localhost bin]$
```

Figure 3: Client can't connect to server



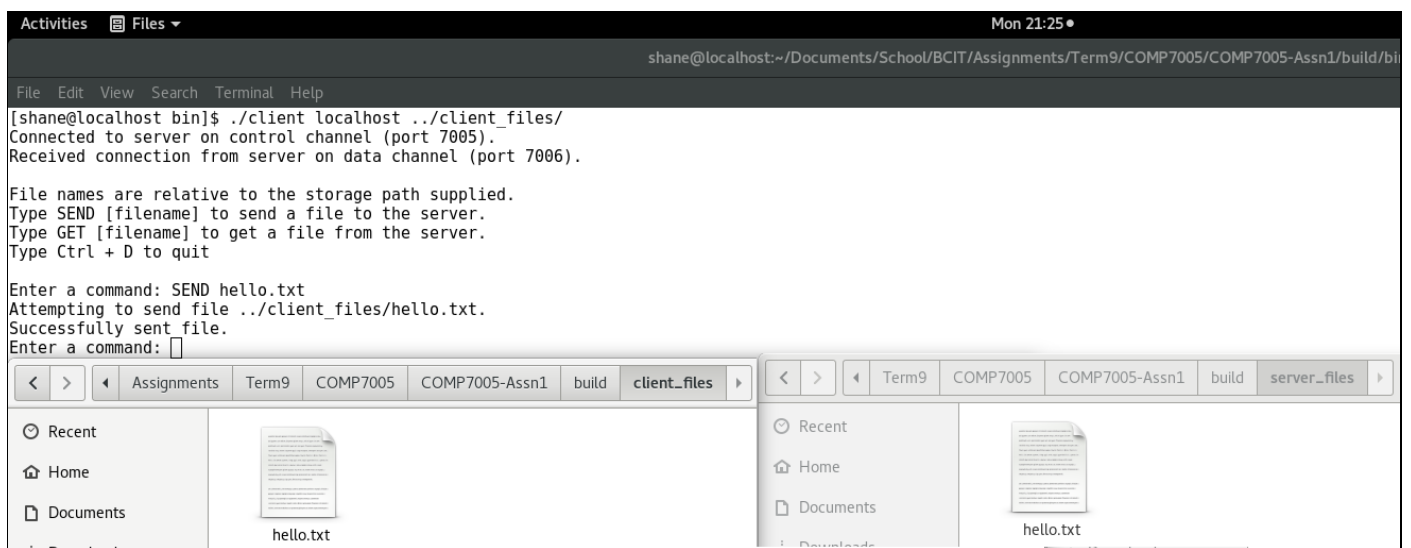
Activities ▢ Terminal ▾

shane@localhost

File Edit View Search Terminal Help

```
[shane@localhost bin]$ ./client localhost ../client_files/  
Connected to server on control channel (port 7005).  
Received connection from server on data channel (port 7006).  
  
File names are relative to the storage path supplied.  
Type SEND [filename] to send a file to the server.  
Type GET [filename] to get a file from the server.  
Type Ctrl + D to quit  
  
Enter a command: Invalid command  
Command format: SEND|GET [filename]  
Enter a command: 
```

Figure 4: Incorrect command is entered on client



Activities ▢ Files ▾

Mon 21:25 •

shane@localhost:~/Documents/School/BCIT/Assignments/Term9/COMP7005/COMP7005-Assn1/build/bi

File Edit View Search Terminal Help

```
[shane@localhost bin]$ ./client localhost ../client_files/  
Connected to server on control channel (port 7005).  
Received connection from server on data channel (port 7006).  
  
File names are relative to the storage path supplied.  
Type SEND [filename] to send a file to the server.  
Type GET [filename] to get a file from the server.  
Type Ctrl + D to quit  
  
Enter a command: SEND hello.txt  
Attempting to send file ../client_files/hello.txt.  
Successfully sent file.  
Enter a command: 
```

File manager windows showing the transfer:

- Left window: Path `Assignments > Term9 > COMP7005 > COMP7005-Assn1 > build > client_files`. Shows a file named `hello.txt`.
- Right window: Path `Term9 > COMP7005 > COMP7005-Assn1 > build > server_files`. Shows a file named `hello.txt`.

Figure 5: User enters SEND command for existing file

```
Activities ▾ Terminal ▾
shane@localhost

File Edit View Search Terminal Help

[shane@localhost bin]$ ./client localhost ../client_files/
Connected to server on control channel (port 7005).
Received connection from server on data channel (port 7006).

File names are relative to the storage path supplied.
Type SEND [filename] to send a file to the server.
Type GET [filename] to get a file from the server.
Type Ctrl + D to quit

Enter a command: SEND non-existent
File "../client_files/non-existent" doesn't exist!
Enter a command: █
```

Figure 6: User enters SEND command for non-existent file

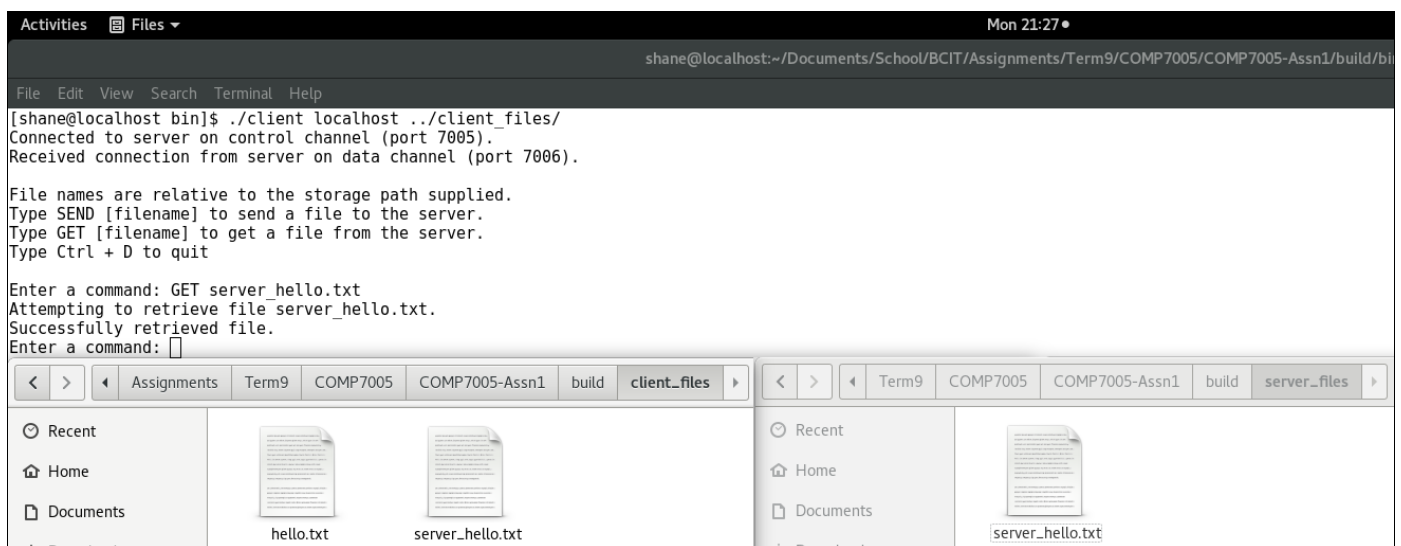
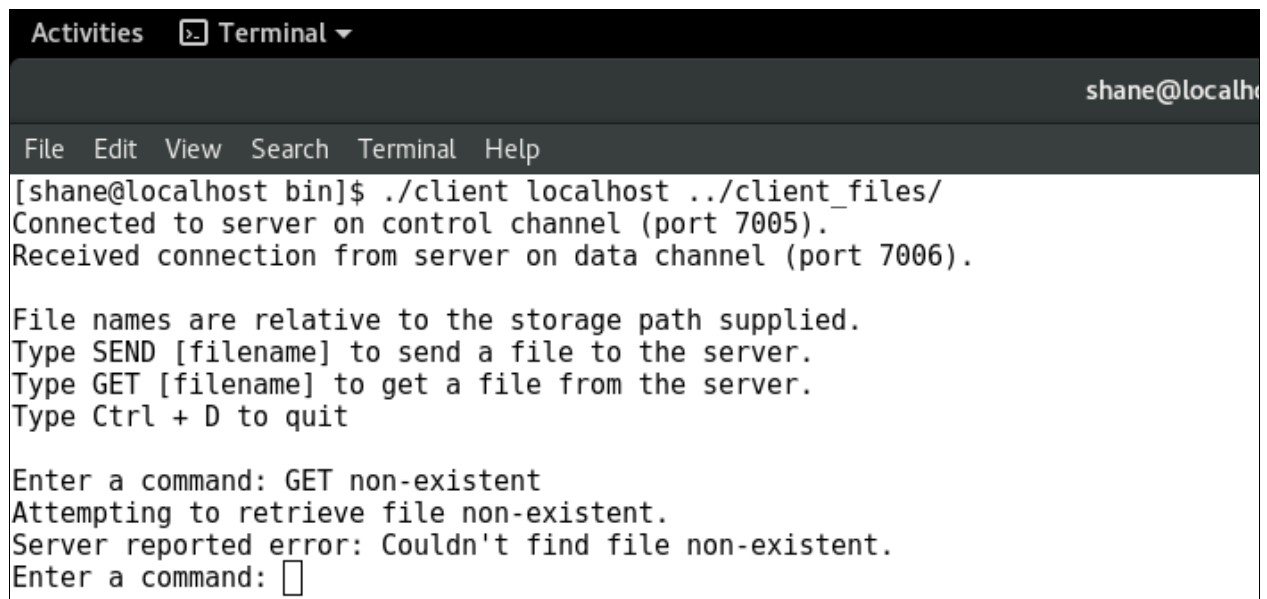


Figure 7: User enters GET command for file that exists on the server

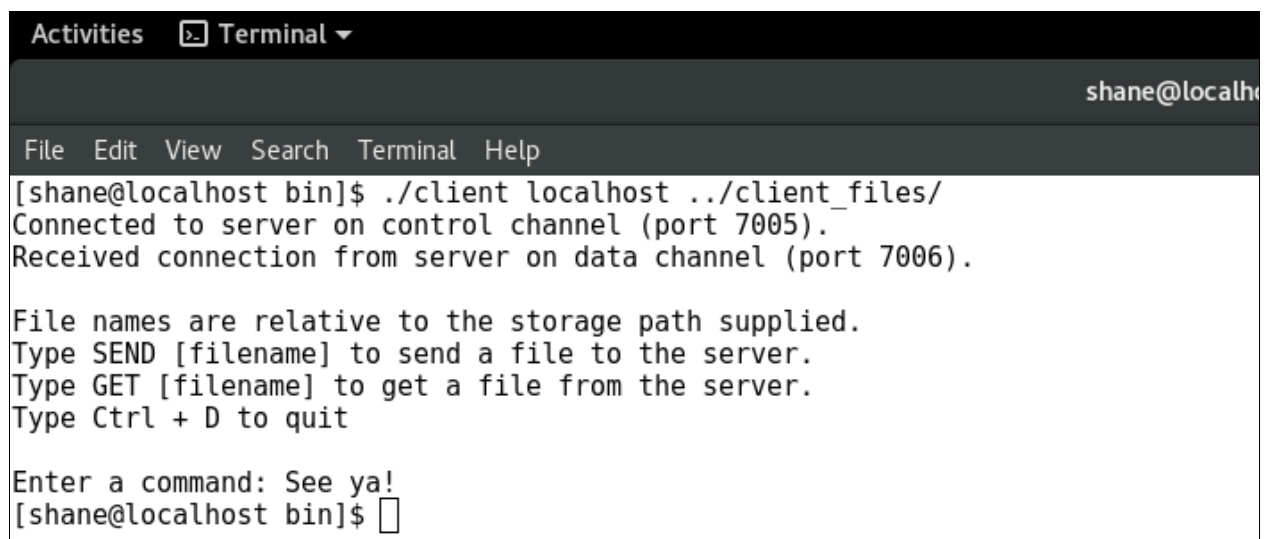


```
Activities [Terminal]
shane@localhost
File Edit View Search Terminal Help
[shane@localhost bin]$ ./client localhost ../client_files/
Connected to server on control channel (port 7005).
Received connection from server on data channel (port 7006).

File names are relative to the storage path supplied.
Type SEND [filename] to send a file to the server.
Type GET [filename] to get a file from the server.
Type Ctrl + D to quit

Enter a command: GET non-existent
Attempting to retrieve file non-existent.
Server reported error: Couldn't find file non-existent.
Enter a command: 
```

Figure 8: User enters GET command for file that doesn't exist on the server



```
Activities [Terminal]
shane@localhost
File Edit View Search Terminal Help
[shane@localhost bin]$ ./client localhost ../client_files/
Connected to server on control channel (port 7005).
Received connection from server on data channel (port 7006).

File names are relative to the storage path supplied.
Type SEND [filename] to send a file to the server.
Type GET [filename] to get a file from the server.
Type Ctrl + D to quit

Enter a command: See ya!
[shane@localhost bin]$ 
```

Figure 9: User enters Ctrl + D