Test Case	Input	Expected	Result
Start server	./bftp	Server starts	Figure 1
Start client with no arguements	./bftp	Server starts	Figure 1
Start client with proper GET arguements	With server running, ./bftp localhost GET big.txt	big.txt is retrieved from server	Figure 2
Start client with proper SEND arguements	With server running, ./bftp localhost SEND big.txt	big.txt is sent to the server	Figure 3 and Figure 4
Start client with invalid address	With server running, ./bftp asdf GET big.txt	Error message appears client exits	Figure 5
Start client with invalid request	With server running, ./bftp localhost asdf big.txt	Error message appears and client exits	Figure 6
Start client GET with invalid filename	With server running, ./bftp localhost GET asdf	Error message appears and client exits	Figure 7
Start client SEND with invalid filename	With server running, ./bftp localhost SEND asdf	Error message and client exits	Figure 8
Start client without server	Without server running, ./bftp localhost GET big.txt	Error message appears and client exits	Figure 9

Figure 1

```
Zaur@LAPTOP-VJ48LA00 /mnt/c/Users/benny/source/repos/7005/assign01/test/srvr (master)  
$\subset$ ./bftp  
Listening...
```

Figure 2

```
Zaur@LAPTOP-VJ48LA00 /mnt/c/Users/benny/source/repos/7005/assign01/test/clnt (master)
L $ 11
total 20
drwxrwxrwx 1 Zaur Zaur 4096 Sep 30 01:34 /
drwxrwxrwx 1 Zaur Zaur 4096 Sep 30 01:33
-rwxrwxrwx 1 Zaur Zaur 19776 Sep 30 01:31 bftp*
Zaur@LAPTOP-VJ48LA00 /mnt/c/Users/benny/source/repos/7005/assign01/test/clnt (master)
$ ./bftp localhost GET big.txt
Host established
Server connected
Zaur@LAPTOP-VJ48LA00 /mnt/c/Users/benny/source/repos/7005/assign01/test/clnt (master)
L $ 11
total 20
drwxrwxrwx 1 Zaur Zaur 4096 Sep 30 01:34 /
drwxrwxrwx 1 Zaur Zaur 4096 Sep 30 01:33
-rwxrwxrwx 1 Zaur Zaur 19776 Sep 30 01:31 bftp*
-rwxrwxrwx 1 Zaur Zaur 75 Sep 30 01:34 big.txt*
Zaur@LAPTOP-VJ48LA00 /mnt/c/Users/benny/source/repos/7005/assign01/test/clnt (master)
L $
```

Figure 3

```
Zaur@LAPTOP-VJ48LA00 /mnt/c/Users/benny/source/repos/7005/assign01/test/srvr (master)
L $ 11
total 20
drwxrwxrwx 1 Zaur Zaur 4096 Sep 30 01:37
drwxrwxrwx 1 Zaur Zaur 4096 Sep 30 01:33
-rwxrwxrwx 1 Zaur Zaur 19776 Sep 30 01:31 bftp*
Zaur@LAPTOP-VJ48LA00 /mnt/c/Users/benny/source/repos/7005/assign01/test/srvr (master)
└$ ./bftp
Listening...
Listening...
Client received, address: 127.0.0.1
Send request received
SEND request received, filename: big.txt
Connected on data port
Creating new file
Sending ACK
Reading header
Header validated
Listening...
^C
Zaun@LAPTOP-VJ48LA00 /mnt/c/Users/benny/source/repos/7005/assign01/test/srvr (master)
<u></u> $ 11
total 20
drwxrwxrwx 1 Zaur Zaur 4096 Sep 30 01:38 /
drwxrwxrwx 1 Zaur Zaur 4096 Sep 30 01:33
-rwxrwxrwx 1 Zaur Zaur 19776 Sep 30 01:31 bftp*
-rwxrwxrwx 1 Zaur Zaur 75 Sep 30 01:38 big.txt*
Zaur@LAPTOP-VJ48LA00 /mnt/c/Users/benny/source/repos/7005/assign01/test/srvr (master)
L $
```

Figure 4

```
Zaur@LAPTOP-VJ48LA00 /mnt/c/Users/benny/source/repos/7005/assign01/test/clnt (master)

$ ./bftp localhost SEND big.txt

Host established

Server connected

Created new socket

Listening...

Connection accepted

ACK received

ACK received

ACK is valid

Zaur@LAPTOP-VJ48LA00 /mnt/c/Users/benny/source/repos/7005/assign01/test/clnt (master)

$ []
```

Figure 5

```
Zaur@LAPTOP-VJ48LA00 /mnt/c/Users/benny/source/repos/7005/assign01/test/clnt (master)

$ ./bftp asdf GET big.txt

Could not establish host: Success

Zaur@LAPTOP-VJ48LA00 /mnt/c/Users/benny/source/repos/7005/assign01/test/clnt (master)

$ $ $
```

Figure 6

```
Zaur@LAPTOP-VJ48LA00 /mnt/c/Users/benny/source/repos/7005/assign01/test/clnt (master)

$ ./bftp localhost asdf big.txt
Usage: ./bftp [server_hostname [GET|SEND] file_name]
Zaur@LAPTOP-VJ48LA00 /mnt/c/Users/benny/source/repos/7005/assign01/test/clnt (master)

$ $ $
```

Figure 7

```
Zaur@LAPTOP-VJ48LA00 /mnt/c/Users/benny/source/repos/7005/assign01 (master)

$ ./bftp localhost SEND asdf

Could not open file: No such file or directory

Zaur@LAPTOP-VJ48LA00 /mnt/c/Users/benny/source/repos/7005/assign01 (master)

$ $ $
```

Figure 8

```
Zaur@LAPTOP-VJ48LA00 /mnt/c/Users/benny/source/repos/7005/assign01/test/clnt (master)

_ $ ./bftp localhost SEND asdf

Host established

Server connected

Could not open file: No such file or directory

Zaur@LAPTOP-VJ48LA00 /mnt/c/Users/benny/source/repos/7005/assign01/test/clnt (master)

_ $ ...
```

Figure 9