Test Case #2

Sample Input File

testcase2.txt
| ```
friendadd root
viewby root
friendadd steveo
friendadd rita
listadd testers
friendadd steveo
logout
viewby steve
viewby steveo
postpicture script
writecomments script echo Hello World!
chmod script -w rw --
chmod script2 rw rw rw
chlst script testers
logout
viewby root
friendadd rita
chlst script testers
listadd testers
friendlist rita testers
friendlist steveo testers
chown script3 rita
logout
viewby rita
postpicture script
writecomments script echo Hello World!
readcomments script
listadd developers
friendadd stew
logout
end
``` |

Line-by-Line Expected Program Execution

`> friendadd root`
- Creates the profile owner `root` by adding entry to *friends.txt file* containing friend name
- Display message to terminal: `"Friend root added"`
- Log message to *audit.txt* file: `"Friend root added"`

`> viewby root`
- Locates entry for friend `root` in *frineds.txt* file
- Friend `root` views the system
- Display message to terminal: `"Friend root views the profile"`
- Log message to *audit.txt* file: `"Friend root views the profile"`

`> friendadd steveo`
- Creates frined `steveo` by adding entry to *friends.txt file* containing friend name
- Display message to terminal: `"Friends steveo added"`
- Log message to *audit.txt* file: `"Friends steveo added"`

`> friendadd rita`
- Creates friend `rita` by adding entry to friends.*txt file* containing friends name
- Display message to terminal: `"Friend rita added"`
- Log message to *audit.txt* file: `"Friend rita added"`

`> listadd testers`
- Creates list `testers` without any users
- Display message to terminal: `"List testers created"`
- Log message to *audit.txt* file: `"List testers created"`

`> friendadd steveo`
- Display message to terminal: `"Error: friend steveo already exists"`
- Log message to *audit.txt* file: `"Error: friend steveo already exists"`

`> logout`
- Friend `root` no longer views the profile
- Display message to terminal: `"Friend root logged out"`
- Log message to *audit.txt* file: `"Friend root logged out"`

> `viewby steve`
- Display message to terminal: "`Failed: invalid friend name`"
- Log message to *audit.txt* file: "`Failed: invalid friend name`"

> `viewby steveo`
- Locates entry for friend `steveo` in friends.*txt* file
- Friend `steveo` views the profile
- Display message to terminal: "`Friend steveo views the profile`"
- Log message to *audit.txt* file: "`Friend steveo views the profile`"

> `postpicture script`
- Creates a file named *script* with default permissions and `steveo` as the owner. The first line of the file is the name of the picture.
- Display message to terminal: "`Picture script with owner steveo and default permissions created`"
- Log message to *audit.txt* file: "`Picture script with owner steveo and default permissions created`"

> `writecomments script echo Hello World!`
- Appends supplied text as new line to *script*
- Display message to terminal: "`Friend steveo wrote to script: echo Hello World!`"
- Log message to *audit.txt* file: "`Friend steveo wrote to script: echo Hello World!`"

> `chmod script -w rw --`
- Sets file permissions for *script* to allow write for owner, read and write for group, and does not allow anything for others.
- Display message to terminal: "`Permissions for script set to -w rw -- by steveo`"
- Log message to *audit.txt* file: "`Permissions for script set to -w rw -- by steveo`"

> `chmod script2 rw rw rw`
- Display message to terminal: "`Error with chmod: picture script2 not found`"
- Log message to *audit.txt* file: "`Error with chmod: picture script2 not found`"

> `chlst script testers`
  - Denies change because `steveo` is not a member of the `testers` list
  - Display message to terminal: `"Error with chlst: User steveo is not a member of list testers"`
  - Log message to *audit.txt* file: `"Error with chlst: User steveo is not a member of list testers"`

> `logout`
  - Friend `steveo` no longer views the profile
  - Display message to terminal: `"Friend steveo logged out"`
  - Log message to *audit.txt* file: `"Friend steveo logged out"`

> `viewby root`
  - Locates entry for friend `root` in friends.*txt* file
  - Friend `root` views the profile
  - Display message to terminal: `"Friend root views the profile"`
  - Log message to *audit.txt* file: `"Friend root views the profile"`

> `friendadd rita`
  - Display message to terminal: `"Error: Friend rita already exists"`
  - Log message to *audit.txt* file: `"Error: Friend rita already exists"`

> `chlst script testers`
  - Sets group for *script* to `testers`
  - Display message to terminal: `"List for script changed to testers by root"`
  - Log message to *audit.txt* file: `"List for script changed to testers by root"`

> `listadd testers`
  - Display message to terminal: `"Error: list testers already exists"`
  - Log message to *audit.txt* file: `"Error: list testers already exists"`

`>friendlist rita testers`
- Adds friend `rita` to list `testers`
- Display message to terminal: "`Friend rita added to list testers`"
- Log message to *audit.txt* file: "`Friend rita added to list testers`"

`>friendlist steveo testers`
- Adds friend `steveo` to list `testers`
- Display message to terminal: "`Friend steveo added to list testers`"
- Log message to *audit.txt* file: "`Friend steveo added to list testers`"

`>chown script3 rita`
- Display message to terminal: "`Error with chown: file script3 not found`"
- Log message to *audit.txt* file: "`Error with chown: file script3 not found`"

`>logout`
- Friend `root` no longer views the profile
- Display message to terminal: "`Friend root logged out`"
- Log message to *audit.txt* file: "`Friend root logged out`"

`>viewby rita`
- Locates entry for friend `rita` in *friends.txt* file
- Friend `rita` views the profile
- Display message to terminal: "`Friend rita views the profile`"
- Log message to *audit.txt* file: "`Friend rita views the profile`"

`>postpicture script`
- Display message to terminal: "`Error: file script already exists`"
- Log message to *audit.txt* file: "`Error: file script already exists`"

`>writecomments script echo Hello World!`
- Appends supplied text as new line to *script*
- Display message to terminal: "`Friend rita wrote to script: echo Hello World!`"
- Log message to *audit.txt* file: "`Friend rita wrote to script: echo Hello World!`"

`> readcomments script`
- Friend `rita` successfully reads *script*
- Display message to terminal:

```
        "Friend rita reads script as:
         echo Hello World!
         echo Hello World!"
```
- Log message to *audit.txt* file:

```
        "Friend rita reads script as:
         echo Hello World!
         echo Hello World!"
```

`> listadd developers`
- Display message to terminal: "`Error: only profile owner may issue listadd command`"
- Log message to *audit.txt* file: "`Error: only profile owner may issue listadd command`"

`> friendadd stew`
- Display message to terminal: "`Error: only profile owner may issue friendadd command`"
- Log message to *audit.txt* file: "`Error: only profile owner may issue friendadd command`"

`> logout`
- Friend `rita` no longer views the profile
- Display message to terminal: "`Friend rita logged out`"
- Log message to *audit.txt* file: "`Friend rita logged out`"

`> end`
- Program writes out the *lists.txt* and *pictures.txt* files, performs necessary clean-up and terminates.

Final Content of User Created Files

Script
echo Hello World!
echo Hello World!

lists.txt Content

lists.txt
testers: rita steveo

pictures.txt Content

pictures.txt
script: steveo testers -w rw --

friends.txt Content

friends.txt
root
steveo
rita

Audit Log Content

```
audit.txt
Friend root added
Friend root views the profile
Friend steveo added
Friend rita added
List testers added
Error: Friend steveo already exists
Friend root logged out
Login failed: invalid friend name
Friend steveo views the profile
File script with owner steveo and default permissions added
Friend steveo wrote to script: echo Hello World!
Permissions for script set to -w rw -- by steveo
Error with chmod: file script2 not found
Error with chlst: Friend steveo is not a member of list testers
Friend steveo logged out
Friend root views the profile
Error: Friend rita already exists
List for script changed to testers by root
Error: List testers already exists
Friend rita added to List testers
Friend steveo added to List testers
Error with chown: file script3 not found
Friend root logged out
Friend rita views the profile
Error: file script already exists
Friend rita wrote to script: echo Hello World!
Friend rita reads script as:
echo Hello World!
echo Hello World!
Error: only root may issue listadd command
Error: only root may issue friendadd command
Friend rita logged out
```