

## 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"

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

### ***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
```