

EXERCISE 1

```
cs1166@jtl-25:~$ cd ~/
cs1166@jtl-25:~$ mkdir letters reports assignment
cs1166@jtl-25:~$ cd letters
cs1166@jtl-25:~/letters$ mkdir formal friendly
cs1166@jtl-25:~/letters$ cd ../reports
cs1166@jtl-25:~/reports$ mkdir personal business school
cs1166@jtl-25:~/reports$ mkdir ../assignment/UNIX
cs1166@jtl-25:~/reports$ cd ~/
cs1166@jtl-25:~$ ls -R
```

```
..:
assignment Downloads      Music          Public  Videos
Desktop  examples.desktop Pictures      reports
Documents letters      Prog-Assign1.docx Templates
```

```
./assignment:
UNIX
```

```
./assignment/UNIX:
```

```
./Desktop:
assignment1 stack.c
```

```
./Desktop/assignment1:
a studentADTAppl.c studentADTif.h studentADTImpl.h
```

```
./Documents:
```

```
./Downloads:
Assignment - 2 - File system.pdf StudentListADTAppl.c StudentListADTImpl.h
Prog_Assign1.docx      StudentListADTif.h
```

```
./letters:
formal friendly
```

```
./letters/formal:
```

```
./letters/friendly:
```

```
./Music:
```

```
./Pictures:
```

```
./Public:
```

```
./reports:
business personal school
```

```
./reports/business:
```

./reports/personal:

./reports/school:

./Templates:

./Videos:

EXERCISE 2

cs1166@jtl-25:~\$ ls -R

```
..  
assignment Downloads      Music      Public  Videos  
Desktop  examples.desktop Pictures    reports  
Documents letters      Prog-Assign1.docx Templates
```

./assignment:

UNIX

./assignment/UNIX:

./Desktop:

assignment1 stack.c

./Desktop/assignment1:

a studentADTAppl.c studentADTif.h studentADTImpl.h

./Documents:

./Downloads:

Assignment - 2 - File system.pdf StudentListADTAppl.c StudentListADTImpl.h
Prog_Assign1.docx StudentListADTif.h

./letters:

formal friendly

./letters/formal:

./letters/friendly:

./Music:

./Pictures:

./Public:

./reports:

business personal school

./reports/business:

./reports/personal:

./reports/school:

./Templates:

./Videos:

```
cs1166@jtl-25:~$ cd assignment
```

```
cs1166@jtl-25:~/assignment$ cd UNIX
```

```
cs1166@jtl-25:~/assignment/UNIX$ pwd
```

```
/rhome/cs1166/assignment/UNIX
```

```
cs1166@jtl-25:~/assignment/UNIX$ vi hw4
```

```
cs1166@jtl-25:~/assignment/UNIX$ cd ~/
```

```
cs1166@jtl-25:~$ cat assignment/UNIX/hw4
```

Unix is an operating system

A file system is a functional and logical collections of files

It has it's own inbuilt programing language which is easy to debug and modify

Bourne shell is the standard shell

```
cs1166@jtl-25:~$ cp ^C
```

```
cs1166@jtl-25:~$ cp ^C
```

```
cs1166@jtl-25:~$ cp assignment/UNIX/hw4 assignment/UNIX/hw4.bk
```

```
cs1166@jtl-25:~$ ls -R
```

..:

assignment Downloads Music Public Videos

Desktop examples.desktop Pictures reports

Documents letters Prog-Assign1.docx Templates

./assignment:

UNIX

./assignment/UNIX:

hw4 hw4.bk

./Desktop:

A2 assignment1 stack.c

./Desktop/assignment1:

a studentADTAppl.c studentADTif.h studentADTImpl.h

./Documents:

./Downloads:

Assignment - 2 - File system.pdf StudentListADTAppl.c StudentListADTImpl.h

Prog_Assign1.docx StudentListADTif.h

./letters:

formal friendly

./letters/formal:

./letters/friendly:

./Music:

./Pictures:

./Public:

./reports:

business personal school

./reports/business:

./reports/personal:

./reports/school:

./Templates:

./Videos:

cs1166@jtl-25:~\$ cd assignment/UNIX

cs1166@jtl-25:~/assignment/UNIX\$ pwd

/rhome/cs1166/assignment/UNIX

cs1166@jtl-25:~/assignment/UNIX\$ ln hw4 hw4HL

cs1166@jtl-25:~/assignment/UNIX\$ ln -s hw4 hw4SL

cs1166@jtl-25:~/assignment/UNIX\$ ls -i hw4 hw4.bk hw4HL hw4SL
12455447 hw4 12455451 hw4.bk 12455447 hw4HL 12455455 hw4SL

//IT IS SEEN THAT ONLY THE INNODES OF THE ORIGINAL FILE AND THE HARDLINK IS THE SAME//

cs1166@jtl-25:~/assignment/UNIX\$ ls -F

hw4 hw4.bk hw4HL hw4SL@

//THE files hw4,hw4HL are normal files,since they come without without extensions,however hw4SL has a @ symbol determining that it is a symbolic link//

EXERCISE 3

cs1166@jtl-25:~\$ find assignment/UNIX -type f

assignment/UNIX/hw4

assignment/UNIX/hw4HL

assignment/UNIX/hw4.bk

cs1166@jtl-25:~\$ cat find assignment/UNIX -type f>backups

bash: backups: Is a directory

cs1166@jtl-25:~/assignment/UNIX\$ ls -i hw4 hw4.bk hw4HL hw4SL
12455447 hw4 12455451 hw4.bk 12455447 hw4HL 12455455 hw4SL

cs1166@jtl-25:~\$ rm assignment/UNIX/hw4

cs1166@jtl-25:~\$ ls -R

..
assignment Documents letters Prog-Assign1.docx Templates
backups Downloads Music Public Videos
Desktop examples.desktop Pictures reports

./assignment:

UNIX

./assignment/UNIX:
hw4.bk hw4HL hw4SL

./backups:

./Desktop:
A2 assignment1 stack.c

./Desktop/assignment1:
a studentADTApl.c studentADTif.h studentADTImpl.h

./Documents:

./Downloads:
Assignment - 2 - File system.pdf StudentListADTApl.c StudentListADTImpl.h
Prog_Assign1.docx StudentListADTif.h

./letters:
formal friendly

./letters/formal:

./letters/friendly:

./Music:

./Pictures:

./Public:

./reports:
business personal school

./reports/business:

./reports/personal:

./reports/school:

./Templates:

./Videos:
cs1166@jtl-25:~\$ cd assignment
cs1166@jtl-25:~/assignment\$ cd UNIX
cs1166@jtl-25:~/assignment/UNIX\$ ls
hw4.bk hw4HL hw4SL
cs1166@jtl-25:~/assignment/UNIX\$ cat hw4.bk
Unix is an operating system
A file system is a functional and logical collections of files
It has it's own inbuilt programing language which is easy to debug and modify
Bourne shell is the standard shell
cs1166@jtl-25:~/assignment/UNIX\$ cat hw4

```
cat: hw4: No such file or directory
cs1166@jtl-25:~/assignment/UNIX$ cat hw4HL
Unix is an operating system
A file system is a functional and logical collections of files
It has it's own inbuilt programing language which is easy to debug and modify
Bourne shell is the standard shell
cs1166@jtl-25:~/assignment/UNIX$ cat hw4SL
cat: hw4SL: No such file or directory
cs1166@jtl-25:~/assignment/UNIX$ cp hw4.bk hw4
cs1166@jtl-25:~/assignment/UNIX$ rm hw4SL
cs1166@jtl-25:~/assignment/UNIX$ ls -R
.:
hw4 hw4.bk hw4HL
```

EXERCISE 4

```
cs1166@jtl-25@cs1166@jtl-25:~$ ls /home/cs1166@jtl-25/assignment/UNIX/*
/home/cs1166@jtl-25/assignment/UNIX/hw4.bk /home/cs1166@jtl-25/assignment/UNIX/hw4SL
/home/cs1166@jtl-25/assignment/UNIX/hw4HL /home/cs1166@jtl-25/assignment/UNIX/hw4.txt
cs1166@jtl-25@cs1166@jtl-25:~$ mv /home/cs1166@jtl-25/assignment/UNIX/hw4.bk
/home/cs1166@jtl-25/assignment/UNIX/hw4.bak
cs1166@jtl-25@cs1166@jtl-25:~$ mkdir friendly
cs1166@jtl-25@cs1166@jtl-25:~/$friendly$ vi friend.1
cs1166@jtl-25@cs1166@jtl-25:~$ mkdir formal
cs1166@jtl-25@cs1166@jtl-25:~/$friendly$ vi formal.1
cs1166@jtl-25@cs1166@jtl-25:~/formal$ cp formal.1 formal.2
cs1166@jtl-25@cs1166@jtl-25:~/formal$ vi formal.2
cs1166@jtl-25@cs1166@jtl-25:~/formal$ cat *.1,2]
```

Formal1

SSN

08/07/19

From

xxx

To

yyy

Respected sir,

Sub-leave permission reg

.....

.....

Thanking you

yours faithfully,

xxx.

Formal2

SSN

08/07/19

From

xxx

To

yyy

Respected sir,

Sub-leave permission reg

.....

.....

Thanking you
yours faithfully,
xxx.

9.
cs1166@jtl-25@cs1166@jtl-25:~\$ mkdir business
10.

11.
./assignment:
UNIX

./assignment/UNIX:
hw4.bak hw4HL hw4SL hw4.txt
./backups:
hw4.bk hw4HL hw4SL hw4.txt
./business:
formal
./business/formal:
formal.1 formal.2
./friendly:
friend.1
./letters:
formal friendly
./letters/formal:
./letters/friendly:
./reports:
business personal school
./reports/business:
./reports/personal:
./reports/school: