### Using Basic UNIX Commands:

Display the current working directory:  
bash  
CopyEdit  
pwd

Display the path to and name of your HOME directory:  
bash  
CopyEdit  
echo $HOME

Display the login name you used to log in:  
bash  
CopyEdit  
whoami

Display hidden files in your current directory:  
bash  
CopyEdit  
ls -a

List the names of all files in your home directory:  
bash  
CopyEdit  
ls ~

Use the long listing format to display files in your directory:  
bash  
CopyEdit  
ls -l

List files starting with "chap" followed by numbers or lowercase letters:  
bash  
CopyEdit  
ls chap[0-9a-z]\*

Create a directory called C\_prog under your home directory:  
bash  
CopyEdit  
mkdir ~/C\_prog

ls ~

Create directories newdir and newdirectory under your home directory:  
bash  
CopyEdit  
mkdir ~/newdir ~/newdirectory

ls ~

List all files, including the contents of subdirectories, under your home directory:  
bash  
CopyEdit  
ls -R ~

Remove the newdirectory directory:  
bash  
CopyEdit  
rmdir ~/newdirectory

Create a directory called temp under your home directory:  
bash  
CopyEdit  
mkdir ~/temp

Remove the newdir directory:  
bash  
CopyEdit  
rmdir ~/newdir

ls ~

Create another directory directorynew under the temp directory:  
bash  
CopyEdit  
mkdir ~/temp/directorynew

Change the directory to your home directory:  
bash  
CopyEdit  
cd ~

1. Change to directorynew using relative and absolute paths:

Relative path:  
bash  
CopyEdit  
cd temp/directorynew

Absolute path:  
bash  
CopyEdit  
cd ~/temp/directorynew

Remove the directory C\_prog in your home directory:  
bash  
CopyEdit  
rmdir ~/C\_prog

Change to the /etc directory and display files present in it:  
bash  
CopyEdit  
cd /etc

ls

List files that begin with a dot in /usr/bin:  
bash  
CopyEdit  
ls -d /usr/bin/.\*

Create a file first.unix with specific contents:  
bash  
CopyEdit  
cat > ~/first.unix << EOF

Hi! Good Morning everybody.

Welcome to the First exercise on UNIX.

Hope you enjoy doing the assignments.

EOF

Copy first.unix to first.unics:  
bash  
CopyEdit  
cp ~/first.unix ~/first.unics

ls ~

List the contents of first.unix and first.unics in a single command:  
bash  
CopyEdit  
cat ~/first.unix ~/first.unics

Create a new directory under the temp directory:  
bash  
CopyEdit  
mkdir ~/temp/newdir

Copy all files from your home directory to the directory under temp:  
bash  
CopyEdit  
cp ~/\* ~/temp/newdir

Move first.unix to temp as second.unix:  
bash  
CopyEdit  
mv ~/first.unix ~/temp/second.unix

Remove the file first.unics from your home directory:  
bash  
CopyEdit  
rm ~/first.unics

Change to temp and issue the command rm \*:  
bash  
CopyEdit  
cd ~/temp

rm \*

1. Observation: All files in the temp directory are deleted.

Move files ending with a, c, and o to the HOME directory:  
bash  
CopyEdit  
mv \*[aco] ~

Copy files ending with UNIX to the temp directory:  
bash  
CopyEdit  
cp \*UNIX ~/temp

Remove all files and the temp directory itself:  
bash  
CopyEdit  
rm -r ~/temp

Try cp and mv with invalid arguments:  
bash  
CopyEdit  
cp

Mv

Observation: Error messages are displayed indicating invalid usage.

Create a file friends using cat:  
bash  
CopyEdit  
cat > friends << EOF

Madhu\t6966456\t09/07/68

Jamil\t2345215\t08/09/67

Ajay\t5546785\t01/04/66

Mano\t7820022\t09/07/68

David\t8281292\t09/09/60

Simmi\t7864563\t12/12/70

Navin\t2224311\t30/05/68

EOF

Display the contents of friends:  
bash  
CopyEdit  
cat friends

Copy friends to newfriends without cp:  
bash  
CopyEdit  
cat friends > newfriends

Display the contents of friends and newfriends:  
bash  
CopyEdit  
cat friends newfriends

Find all users currently working on the system and store output in users:  
bash  
CopyEdit  
who > users

Append friends contents to users:  
bash  
CopyEdit  
cat friends >> users

Display the current system date and time:  
bash  
CopyEdit  
date

Display the calendar for your birth month and year:  
bash  
CopyEdit  
cal [month] [year]

Try the date commands and observe the outputs:  
bash  
CopyEdit  
date "+ %" :: **%**

date "+%m" ::**01 to 12**

date "+%D" :: **MM/DD/YY**

date "+%/%Training Activity" :: **%/Training Activity or error**

date "+%Training Activity"

date "+%r":: HH:MM:SS AM/PM

### Using Pipes and Filters:

Redirect ls help content into lsdoc:  
bash  
CopyEdit  
man ls > lsdoc

Display lsdoc content page-wise:  
bash  
CopyEdit  
less lsdoc

Create data.txt using input redirection:  
bash  
CopyEdit  
cat > data.txt

Display data.txt:  
bash  
CopyEdit  
cat data.txt

Remove data.txt:  
bash  
CopyEdit  
rm data.txt

Use error redirection to display data.txt, store errors in errorlog.txt:  
bash  
CopyEdit  
cat data.txt 2> errorlog.txt

Display the errorlog file:  
bash  
CopyEdit  
cat errorlog.txt