

## 7. Moving, Renaming and Removing Files

This lab will explain how to move files and directories around the UNIX filesystem, how to rename files and directories and how to remove files.

### Lab 7.1 – Moving files

The UNIX `mv` command moves files and directories. You can move a file to a different location in the filesystem, or change the name by moving the file within the current location.

To move a file from one place to another, use the **mv** command. This has the effect of moving rather than copying the file, so you end up with only one file rather than two.

It can also be used to rename a file (see Lab 7.2), by "moving" the file to the same directory, but giving it a different name.

We are now going to move the file **zeebrafile2** to your **training2** directory. First, make sure you are in your home directory by typing **cd**

```
mv zeebrafile2 training2/
```

Type **ls** and **ls training2** to see if it has worked, which it has. Zeebrafile2 no longer exists in the home directory and is now in the training2 directory instead.

### Lab 7.2 - Renaming a Files and Directories

Unix does not have a command specifically for renaming files and directories. Instead, the `mv` command is used, either to change the name of a file, or to move a file into a different directory.

To change the name of a file, use the following command:

```
cat apple2 - to check the contents of the apple2 file
```

```
mv apple2 rotten
```

```
ls - to check what files are left and what is created. apple2 is gone but rotten is created
```

```
cat rotten – to check if the contents of the rotten file are the same as the old apple2 file
```

The result of this command is that there is no longer a file called `apple2`, but a new file called `rotten` contains what was previously in `apple2`. It has been renamed

Like `cp`, the `mv` command also overwrites existing files.

## Lab 7.3 - rm (removing files)

Be very carefull when removing files – you cannot recover what you delete in UNIX and you might remove something by mistake. Typing **rm \*** (***do not type!!***) for example would wipe your entire directory.

To remove the **rotten** file that you placed in your current directory type:

```
rm rotten
```

It is good practise to make sure before you use the rm command. An even better way is to use interactive delete with the **-i** option:

```
rm -i apple3
```

```
rm: remove apple3 (yes/no)? no
```

To remove a directory the command **rmdir** is used as you were shown. This command only worked if the directory specified is *empty*. To remove a directory with files in it use the command **rm -r** *directory-name* (for recursive). Be carefull when doing this however and always use the **i** option with it:

```
rm -ir training2/dir1
```

```
rm: remove dir1 (yes/no)? no
```

## Lab 7.4 - Some simple History Commands

The "history" command gives you a method for repeating commands entered earlier in your session. By typing

```
history
```

you will get a list of all your previously entered commands – 50 by default. Three examples of its use:

**!!**      **!!** – repeats last command  
Refers to the previous command.

**!n**      **!3** – repeats third entry in history list  
Refers to history line *n*.

**!str**    **!c** – repeats most recent command starting with *c*  
Refers to the most recent command that started with the string *str*.

Refer to the manual pages for any further interest

## Exercise 7.1

Do the following in order:

- In your home directory, create a directory called **Exercise2** with a directory **store1** inside it.
- Inside in **store1** create another directory called **holdings**.
- Create a blank file in your home directory called **ex2**.
- Create another file called **classfile** with the calendar for the year you were born in it.
- Create a copy of **classfile** with the *same name* in the **store1** directory.
- Rename **classfile** in your home directory to **datefile**.
- Create a file called **timefile** in your home directory with todays date and time.
- Create a new file called **addfile** containing the contents of **timefile** and **datefile**.
- Add a list of all your files in your home directory to the end of **addfile**
- Add a history of all your commands to the end of **addfile**
- Make a copy of this file in your **Exercise2** directory called **copyfile**
- Make a copy of the **Exercise2** directory and call it **Ex2Copy**
- Delete the original directory **Exercise2**
- Remove the files **datefile**, **timefile** and **addfile**.