



**Networks and Operating Systems (CS5001NI)**

**Course Work 2**

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# Marking Scheme

|  |  |
| --- | --- |
| **Student:** | Manish Giri |
| **Project title:** | **Course Work 1** |
| **Marker:** | **Er. Mukesh Regmi** |
| **Script File Size:** | 45 Kilo bytes |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | **Task No** | **Full Marks** | **Awarded Marks** | **Comments** |
| **0. Representation of Course Work** | Space Between Tasks | 1 |  |  |
| Style of Task Titles and Comments | 2 |  |  |
| "Rubbish" Cleaned | 2 |  |  |
| **1.Creating New Directories** | TNO1 | 8 |  |  |
| **2. Removing Exisitng Files and Directories** | TNO2 | 4 |  |  |
| TNO3 | 4 |  |  |
| **3. Usage of the echo Command** | TNO4 | 2 |  |  |
| TNO5 | 2 |  |  |
| TNO6 | 2 |  |  |
| **4. Usage of the ls command** | TNO7 | 2 |  |  |
| TNO8 | 4 |  |  |
| **5. Usage of the CAT command** | TNO9 | 2 |  |  |
|  | TNO10 | 2 |  |  |
| TNO11 | 2 |  |  |
| TNO12 | 4 |  |  |
| TNO13 | 2 |  |  |
| **6. Usage of the chmod command** | TNO14 | 6 |  |  |
| TNO15 | 6 |  |  |
| **7. Usage of the grep command** | TNO16 | 10 |  |  |
| **8. Aliasing** | TNO17 | 4 |  |  |
| TNO18 | 4 |  |  |
| TNO19 | 2 |  |  |
| TNO20 | 3 |  |  |
| TNO21 | 3 |  |  |
| TNO22 | 3 |  |  |
| **9. Usage of your own commands** | TNO23 | 1 |  |  |
| TNO24 | 1 |  |  |
| TNO25 | 1 |  |  |
| **10. Command History** | TNO26 | 2 |  |  |
| TNO27 | 2 |  |  |
| TNO28 | 2 |  |  |
| **11. Presentation** |  | 10 |  |  |
| **Total (maximum 100)** | | |  | **In Words**  **:** |

# Acknowledgement

The success and final outcome of this project required a lot of guidance and assistance from many people and I am extremely privileged to have got this all along the completion of my project. All that I have done is only due to such supervision and assistance and I would not forget to thank them.

I respect and thank to **Mr. Mukesh Regmi** , for providing me an opportunity to do the project work in and giving us all support and guidance which made me complete the project duly. I am extremely thankful to him for providing such a nice support and guidance, although he had busy schedule managing the college affairs.

# Introduction

This project mainly presents the work done in UNIX as per the question given by our module leader Mr. Mukesh Regmi.

UNIX is an operating system which was first developed in the 1960s, and has been under constant development ever since. UNIX is a stable, multi-user, multi-tasking system for servers, desktops and laptops. The most popular varieties of UNIX are sun Solaris, GNU/Linux and MacOS X.

# Objectives of the coursework

* To introduce students some relevant UNIX interface details by practicing UNIX commands
* To perform some simple file-based operation by putting commands step by step.

# TRANSCRIPT

Script started on Sun 24 Dec 2017 09:14:04 AM +0545

]0; student@Islington: ~student@Islington:~$ ls

### #Task 1

$ mkdir Cricket

/Cricket$ mkdir India

/Cricket$ mkdir Australia

/Cricket$ mkdir England

/Cricket$ mkdir Pakistan

/Cricket$ mkdir Bangladesh

/Cricket$ ls

Australia Bangladesh England India Pakistan

**TOTAL MARKD AWARDED FOR TASK:**

### #TASK 2

/Cricket$ cd India

/Cricket/India$ pwd

/home/student/Cricket/India

/Cricket/India$ cat > goa

/Cricket/India$ cat > mumbai

/Cricket/India$ cat > banglore

**TOTAL MARKD AWARDED FOR TASK:**

### #Task 3

/Cricket/India$ cd ..

/Cricket$

/Cricket$ cd India

/Cricket/India$ rm -i goa

remove regular empty file 'goa'? y

/Cricket/India$ rm mumbai

/Cricket/India$ rm banglore

/cricket/india$ cd ..

/cricket$ rm -r -f india

/Cricket$ ls

Australia Bangladesh England Pakistan

**TOTAL MARKD AWARDED FOR TASK:**

### #Task 4

/Cricket$ echo "Hello! I am proud to be part of Islington Family.

> 14<(2:8)"

Hello! I am proud to be part of Islington Family. 14<(2:8)

/Cricket$ pwd

/home/student/Cricket

$ cd Cricket/Australia

/Cricket/Australia$ pwd

/home/student/Cricket/Australia

**TOTAL MARKD AWARDED FOR TASK:**

### #Task 5

/Cricket/Australia$ pwd; cd;pwd

/home/student/Cricket/Australia

/home/student

$ echo " first pwd shows that where we are

> Then command cd take you to the home directory.

> The last command pwd again show you the current location location of the current directory after bringing to home."

**TOTAL MARKD AWARDED FOR TASK:**

### #Task 6

student@Islington:~$ cd Cricket/Australia

/Cricket/Australia$ pwd; cd ..; pwd; cd ..;pwd

/home/student/Cricket/Australia

/home/student/Cricket

/home/student

student@Islington:~$ echo "The pwd command show the current location of current directory, cd .. command take you one step back from current directory, again pwd command show the current location after returning back from Australia directory to Cricket, cd .. command again take you to the home directory and pwd command show the current location after returning to home."

**TOTAL MARKD AWARDED FOR TASK:**

### #Task 7

student@Islington:~$ cd; pwd

/home/student

student@Islington:~$ echo "the cd command take you to student directory of home and pwd command show the current location"

student@Islington:~$ ls

student@Islington:~$ echo “The ls command shows the folder files from the student directory.”

student@Islington:~$ ls –a

echo " The ls -a command show all the files and folders including hidden also."

student@Islington:~$ ls –al

student@Islington:~$ echo " The command show the access permission of the all the files and folders."

**TOTAL MARKD AWARDED FOR TASK:**

### #Task 8

student@Islington:~$ cd;pwd;cd cw1; pwd

/home/student

bash: cd: cw1: No such file or directory

/home/student

student@Islington:~$ echo The cd command take you to home location,

> pwd shows the current location,

> cd cw1 will take you to the cw1 folder but in this case it shows error as we dont have cw1 folder,

> again pwd show the current location."

student@Islington:~$ ls –R

student@Islington:~$ echo " The command shows all the files and folders in a recursive way."

**TOTAL MARKD AWARDED FOR TASK:**

### #Task 9

~/Cricket/Pakistan$ cat > testX

aaaabbb Aaaaaa AAAAAAAAA

bbbbccc Bbbbbbbb BBBBBBBBB

fff-fff Cccccc ccccccdddd Ddddddd DDDDDDDDDD

~/Cricket/Pakistan$ cat > testY

aaaaabbbb Aaaaaa AAAAAAAAA

bbbccc Bbbbb BBBBBBB

FF-FF c\_ \_Ccccccc CCCCCCCC

cccddd Dddddd DDDDDD

~/Cricket/Pakistan$ cat > testZ

aaaaabbbbb Aaaaaa AAAAAAAA

bbbccc Bbbbbbb BBBBBB

ff-ff Ccccc CCCCCC

cccdd Dddddd DDDDDDD

**TOTAL MARKD AWARDED FOR TASK:**

### #Task 10

~/Cricket/Pakistan$ cat testX

aaaabbb Aaaaaa AAAAAAAAA

bbbbccc Bbbbbbbb BBBBBBBBB

fff-fff Cccccc ccccccdddd Ddddddd DDDDDDDDDD

~/Cricket/Pakistan$ cat testY

aaaaabbbb Aaaaaa AAAAAAAAA

bbbccc Bbbbb BBBBBBB

FF-FF Ccccccc CCCCCCCC

cccddd Dddddd DDDDDD

~/Cricket/Pakistan$ cat testZ

aaaaabbbbb Aaaaaa AAAAAAAA

bbbccc Bbbbbbb BBBBBB

ff-ff Ccccc CCCCCC

cccdd Dddddd DDDDDDD

**TOTAL MARKD AWARDED FOR TASK:**

### #Task 11

:~/cricket/Pakistan$ cp testx testy testz ../bangladesh

**TOTAL MARKD AWARDED FOR TASK:**

### #Task 12

:~/cricket/Pakistan$ cat testx testy testz aaaabbb Aaaaaa AAAAAAAAA

bbbbccc Bbbbbbbb BBBBBBBBB

fff-fff Cccccc ccccccdddd Ddddddd DDDDDDDDDD

aaaaabbbb Aaaaaa AAAAAAAAA

bbbccc Bbbbb BBBBBBB

FF-FF Ccccccc CCCCCCCC

cccddd Dddddd DDDDDD

aaaaabbbbb Aaaaaa AAAAAAAA

bbbccc Bbbbbbb BBBBBB

ff-ff Ccccc CCCCCC

cccdd Dddddd DDDDDDD

:~/cricket/Pakistan$ cat testx testy testz>testResult

:~/cricket/Pakistan$ cat testx - testy>>testResult asdasdasd

:~/cricket/Pakistan$ cat testResult aaaabbb Aaaaaa AAAAAAAAA

bbbbccc Bbbbbbbb BBBBBBBBB

fff-fff Cccccc

ccccccdddd Ddddddd DDDDDDDDDD

aaaaabbbb Aaaaaa AAAAAAAAA

bbbccc Bbbbb BBBBBBB

FF-FF Ccccccc CCCCCCCC

cccddd Dddddd DDDDDD

aaaaabbbbb Aaaaaa AAAAAAAA

bbbccc Bbbbbbb BBBBBB

ff-ff Ccccc CCCCCC

cccdd Dddddd DDDDDDD

aaaabbb Aaaaaa AAAAAAAAA

bbbbccc Bbbbbbbb BBBBBBBBB

fff-fff Cccccc ccccccdddd Ddddddd DDDDDDDDDD

asdasdasd aaaaabbbb Aaaaaa AAAAAAAAA

bbbccc Bbbbb BBBBBBB

FF-FF Ccccccc CCCCCCCC

cccddd Dddddd DDDDDD

**TOTAL MARKD AWARDED FOR TASK:**

### #Task 13

~/cricket/Pakistan$ cat test[xyz] aaaabbb Aaaaaa AAAAAAAAA

bbbbccc Bbbbbbbb BBBBBBBBB

fff-fff Cccccc ccccccdddd Ddddddd DDDDDDDDDDaaaaabbbb Aaaaaa AAAAAAAAA

bbbccc Bbbbb BBBBBBB

FF-FF Ccccccc CCCCCCCC

cccddd Dddddd DDDDDD

aaaaabbbbb Aaaaaa AAAAAAAA

bbbccc Bbbbbbb BBBBBB

ff-ff Ccccc CCCCCC

cccdd Dddddd DDDDDDD

~/cricket/Pakistan$ echo” Displaying all testx testy and testz together”

**TOTAL MARKD AWARDED FOR TASK:**

### #Task 14

**Display access permissions for files in Pakistan**

~/Cricket/Pakistan$ ls -l

-rw-rw-r-- 1 student student 479 Dec 24 09:34 testResult

-rw-rw-r-- 1 student student 98 Dec 24 09:29 testX

-rw-rw-r-- 1 student student 92 Dec 24 09:30 testY

-rw-rw-r-- 1 student student 89 Dec 24 09:30 testZ

-rw-rw-r-- 1 student student 0 Dec 24 09:30 TESTZ

**Remove all access permissions for the testX file.**

~/Cricket/Pakistan$ chmod ugo-rwx testX

**Display access permissions for the testX file.**

~/Cricket/Pakistan$ ls -l testX

---------- 1 student student 66 Dec 24 09:44 testX

**Try to read this file using any utility.**

~/Cricket/Pakistan$ cat testX cat: testX: Permission denied

**Try to write into this file using any utility**.

~/Cricket/Pakistan$ cat > testX bash: testX: Permission denied

**Add read and write access permissions for yourself for the testX file**

~/Cricket/Pakistan$ chmod u+rw testX

**Display access permissions for the testX file.**

~/Cricket/Pakistan$ ls -l testX

-rw------- 1 student student 66 Dec 24 09:44 testXs

**Try to read this file using any utility.**

~/Cricket/Pakistan$ cat testX aaabb Aaaaa

AAAAA

bbbcc Bbbbb ff-ff Ccccc CCCCC

cccdd Ddddd DDDDD

**Try to write into this file using any utility.**

~/Cricket/Pakistan$ cat > testX permission access

**TOTAL MARKD AWARDED FOR TASK:**

### #Task 15

**Change to the Cricket directory.**

~/Cricket/Pakistan$ cd ..

**Display access permissions for Pakistan.**

~/Cricket$ ls -ld

drwxrwxr-x 6 student student 4096 Dec 24 09:24 [0m[01;34m.[0m

**Remove all access permissions for the Pakistan directory.**

~/Cricket$ chmod ugo-rwx Pakistan

**Display access permissions for Pakistan.**

~/Cricket$ ls -ld Pakistan

d--------- 2 student student 4096 Dec 24 09:47 [0m[01;34mPakistan[0m

**Try to read a file from Pakistan using any utility.**

~/Cricket$ cat Pakistan/testX

cat: Pakistan/testX: Permission denied

**Try to put a file into Pakistan using any utility.**

~/Cricket$ cat > Pakistan/testX

bash: Pakistan/testX: Permission denied

**Try to search in Pakistan using any command.**

~/Cricket$ ls Pakistan

ls: cannot open directory 'Pakistan': Permission denied

**Add read, write, and execute access permissions for yourself for the Pakistan directory.**

~/Cricket$ chmod u+rwx Pakistan

**Display access permissions for Pakistan.**

~/Cricket$ ls -ld Pakistan

drwxrwxr-x 2 student student 4096 Dec 24 09:47 [0m[01;34mPakistan[0m

**Try to read a file from Pakistan using any utility.**

~/Cricket student@Islington:~/Cricket$ cat Pakistan testX permission overwrite

**Try to put a file into Pakistan using any utility.**

~/Cricketstudent@Islington:~/Cricket$ cat > Pakistan fileAdd File is added.

**Try to search in Pakistan using any command.**

~/Cricket$ ls Pakistan fileAddtestResult testX testY testZ

**TOTAL MARKD AWARDED FOR TASK:**

### #Task 16

* grep bb testX

~/Cricket/Bangladesh$ grep bb testX

* grep -v bb testX

~/Cricket/Bangladesh$ grep -v bb testX

* grep -n bb testX

~/Cricket/Bangladesh$ grep -n bb testX

* grep -l bb \*

~/Cricket/Bangladesh$ grep -I bb \*

* grep -i bb \*

~/Cricket/Bangladesh$ grep -i bb \*

* grep -i BB \*

~/Cricket/Bangladesh$ grep -i BB \*

* grep -c bb \*

~/Cricket/Bangladesh$ grep -c bb \*

* grep '^A' \*

~/Cricket/Bangladesh$ grep '^A' \*

* grep -n '^' testX

~/Cricket/Bangladesh$ grep -n '^' testX

**TOTAL MARKD AWARDED FOR TASK:**

### #Task 17

**Defining alias ls-l and ls-al**

~/Cricket/Bangladesh$ alias "lsl=ls -l"

~/Cricket/Bangladesh$ lsl

~/Cricket/Bangladesh$ alias "lsal=ls -al"

~/Cricket/Bangladesh$ lsal

**Using these alias in home directory**

~student@Islington:~$ lsl

~student@Islington:~$ lsal

**TOTAL MARKD AWARDED FOR TASK:**

### #Task 18

**Remove these aliases.**

~$ unalias lsl

~$ unalias lsal

**Show that your system does not store these aliases.**

~$ lsl

No command 'lsl' found.

~$ lsal

No command 'lsal' found.

**TOTAL MARKD AWARDED FOR TASK:**

### #Task 19

**Define the aliases again preserving them for the next session.**

~$ nano .basrc

alias "lsl=ls -l" alias "lsal=ls -al"

**Show that the system still keeps these aliases and they work.**

~student@Islington:~$ lsl total 68

~student@Islington:~$ lsal total 160

**TOTAL MARKD AWARDED FOR TASK:**

### #Task 20

**Define the noAllf alias for a group of commands counting and displaying the number of all files.**

~student@Islington:~$ alias "noAllf=ls –a|wc -w"

**Put the alias in your environmental file.**

~$ noAllf

**TOTAL MARKD AWARDED FOR TASK:**

### #Task 21

**Define the noAsubsir alias for a group of commands counting recursively and displaying the number of all sub-directories.**

~student@Islington:~$ alias "noAsubsir=ls -sR"

**Put the alias in your environmental file.**

~$ noAsubsir

**TOTAL MARKD AWARDED FOR TASK:**

### #Task 22

**Define the noAcs alias for a group of commands counting and displaying the number of all files in your account’s space with the names starting with g, t, and w.**

alias noAcs='ls -aR | wc -l | grep ^[gtw]'>>.rozeen

**TOTAL MARKD AWARDED FOR TASK:**

### #Task 23

~$ noAllf

**TOTAL MARKD AWARDED FOR TASK:**

### #Task 24

~$ noAsubsir

**TOTAL MARKD AWARDED FOR TASK:**

### #Task 25

~$ noAcs

**TOTAL MARKD AWARDED FOR TASK:**

### #Task 26

**List your last commands executed giving the history command.**

~$ history

**TOTAL MARKD AWARDED FOR TASK:**

### #Task 27

**Re execute the command given seven commands ago.**

~$ fc -e- 7

**TOTAL MARKD AWARDED FOR TASK:**

### #Task 28

**Re execute the last command which name begins with ‘c’.**

~$ fc -e- 'c'

**TOTAL MARKD AWARDED FOR TASK:**

# CONCLUSION

The tasks (i.e. 1-33) are completed successfully and are recorded in the script file named 11069803cw1. .In addition, some rubbish is also cleaned before finalizing the report.

# REFERENCES

* + London Metropolitan University, (n.d.). *Operating System* [online] available at:< <http://learning.londonmet.ac.uk/computing/IC_Link/Comp/modules/cc2011/WeekByWeek.html>> [Accessed JAN 6, 2012 ]