LINUX COMMANDS

Q1. Change your password to a password you would like to use for the remainder of the semester.

student@admins-iMac-2 ~ % passwd

Changing password for student.

Old Password:

New Password:

Retype New Password:

passwd : password updated successfully

**Q2. Display the system’s date.**

student@admins-iMac-2 ~ % date

Thu Jan 11 12:22:35 IST 2024

**Q3. Count the number of lines in the /etc/passwd file.**

student@admins-iMac-2 ~ % wc /etc/passwd

120 322 7630 /etc/passwd

**Q4. Find out who else is on the system.**

student@admins-iMac-2 ~ % who

student console Jan 11 10:04

student ttys000 Jan 11 12:15

**Q5 . Direct the output of the man pages for the date command to a file named mydate.**

student@admins-iMac-2 ~ % man date > mydate1

student@admins-iMac-2 ~ % cat mydate1

**6. Create a subdirectory called mydir.**

student@admins-iMac-2 ~ % mkdir mydir10

**7. Move the file mydate into the new subdirectory.**

student@admins-iMac-2 ~ % mv mydate mydir10/

**8.) Go to the subdirectory mydir and copy the file mydate to a new file called ourdate**

student@admins-iMac-2 ~ % mv mydate1 mydir10/

student@admins-iMac-2 ~ % mydir10

student@admins-iMac-2 ~ % cd mydir10

student@admins-iMac-2 mydir10 % cp mydate1 ourdate

**9. List the contents of mydir.**

student@admins-iMac-2 mydir10 % ls

mydate1 ourdate

**10. Do a long listing on the file ourdate and note the permissions.**

student@admins-iMac-2 mydir10 % ls -l

student@admins-iMac-2 mydir10 % ourdate

student@admins-iMac-2 mydir10 % ls -l ourdate

-rw-r--r-- 1 student staff 12418 Jan 11 12:40 ourdate

**11. Display the name of the current directory starting from the root.**

student@admins-iMac-2 mydir10 % pwd

/Users/student/mydir10

**12. Move the files in the directory mydir back to your home directory.**

student@admins-iMac-2 mydir10 % cp \* /home

**13. Display the first 5 lines of mydate.**

student@admins-iMac-2 mydir10 % head -5 mydate1

DATE(1) BSD General Commands Manual DATE(1)

NAME

date -- display or set date and time

**14. Display the last 8 lines of mydate.**

student@admins-iMac-2 mydir10 % tail -8 mydate1

The date utility is expected to be compatible with IEEE Std 1003.2

(``POSIX.2''). The -d, -f, -j, -n, -r, -t, and -v options are all exten-

sions to the standard.

HISTORY

A date command appeared in Version 1 AT&T UNIX.

BSD May 7, 2015 BSD

**15. Remove the directory mydir.**

student@admins-iMac-2 mydir10 % rm -rf mydir10

student@admins-iMac-2 mydir10 % rm -rf \*

zsh: sure you want to delete all 2 files in /Users/student/mydir10 [yn]? y

**16. Redirect the output of the long listing of files to a file named list.**

student@admins-iMac-2 ~ % ls -l >list

student@admins-iMac-2 ~ % list

student@admins-iMac-2 ~ % cat list

total 1104

**17.) Select any 5 capitals of states in India and enter them in a file named capitals1. Choose 5**

**more capitals and enter them in a file named capitals2. Choose 5 more capitals and enter them in**

**a file named capitals3. Concatenate all 3 files and redirect the output to a file named capitals.**

student@admins-iMac-3 ~ % cat > capitals1

Mumbai

Bengaluru

Pune

Tokyo

Shibuya

student@admins-iMac-3 ~ % cat > capitals2

Hyderabad

Berlin

Nairobi

Amsterdam

Chennai

student@admins-iMac-3 ~ % cat > capitals3

Panjim

Mapusa

Phonda

Amba

Trivandrum

student@admins-iMac-3 ~ % cat capitals1 capitals2 capitals3 > capitals

student@admins-iMac-3 ~ % cat capitals

Mumbai

Bengaluru

Pune

Tokyo

Shibuya

Hyderabad

Berlin

Nairobi

Amsterdam

Chennai

Panjim

Mapusa

Phonda

Amba

Trivandrum

student@admins-iMac-3 ~ %

**18.) Concatenate the file capitals2 at the end of file capitals.**

student@admins-iMac-3 ~ % cat capitals2 >> capitals

student@admins-iMac-3 ~ % cat capitals

Mumbai

Bengaluru

Pune

Tokyo

Shibuya

Hyderabad

Berlin

Nairobi

Amsterdam

Chennai

Panjim

Mapusa

Phonda

Amba

Trivandrum

Hyderabad

Berlin

Nairobi

Amsterdam

Chennai

**19. Give read and write permissions to all users for the file capitals.**

student@admins-iMac-3 ~ % chmod 777 capitals

student@admins-iMac-3 ~ % ls -l capitals

-rwxrwxrwx 1 student staff 160 Jan 25 13:44 capitals

**20.) Give read permissions only to the owner of the file capitals. Open the file, make some**

**changes and try to save it. What happens ?**

student@admins-iMac-3 ~ % ls -l capitals

-r--rwxrwx 1 student staff 160 Jan 25 13:44 capitals

student@admins-iMac-3 ~ % cat > capitals

zsh: permission denied: capitals

**21.) Create an alias to concatenate the 3 files capitals1, capitals2, capitals3 and redirect the output**

**to a file named capitals. Activate the alias and make it run.**

student@admins-iMac-3 ~ % alias f1="cat capitals1 capitals2 capitals3 >> capitals"

student@admins-iMac-3 ~ % f1

zsh: permission denied: capitals

student@admins-iMac-3 ~ % cat capitals

Mumbai

Bengaluru

Pune

Tokyo

Shibuya

Hyderabad

Berlin

Nairobi

Amsterdam

Chennai

Panjim

Mapusa

Phonda

Amba

Trivandrum

Hyderabad

Berlin

Nairobi

Amsterdam

Chennai

**22.) Find out the number of times the string “the” appears in the file mydate.**

student@admins-iMac-3 mydir % grep -o -i the mydate | wc -l

175

**23.) Find out the line numbers on which the string “date” exists in mydate.**

student@admins-iMac-3 mydir % grep -n date mydate

5: date -- display or set date and time

16: date and time. Otherwise, depending on the options specified, date will

17: set the date and time or print it in a user-defined way.

19: The date utility displays the date and time read from the kernel clock.

20: When used to set the date and time, both the kernel clock and the hard-

21: ware clock are updated.

23: Only the superuser may set the date, and if the system securelevel (see

37: -j Do not try to set the date. This allows you to use the -f flag

**24.) Print all lines of mydate except those that have the letter “i” in them.**

student@admins-iMac-3 mydir % grep -v "i" mydate

**25.) List the words of 4 letters from the file mydate.**

student@admins-iMac-3 mydir % grep -Eo '\b\w{4}\b' mydate

UNIX

2015

student@admins-iMac-3 mydir %

**26) List 5 states in north east India in a file mystates. List their corresponding capitals in a file**

**mycapitals. Use the paste command to join the 2 files.**

student@admins-iMac-3 ~ % cat >mystates

Assam

Nagaland

Sikkim

Meghalaya

Mizoram

student@admins-iMac-3 ~ % cat >mycapitals

Dispur

Kohima

Gangtok

Shillong

Aizhwal

student@admins-iMac-3 ~ %

student@admins-iMac-3 ~ % paste mystates mycapitals

Assam Dispur

Nagaland Kohima

Sikkim Gangtok

Meghalaya Shillong

Mizoram Aizhwal

**27.) Use the cut command to print the 1 st and 3 rd columns of the /etc/passwd file for all students**

**in this class.**

student@admins-iMac-3 ~ % cut -d: -f1,3 /etc/passwd

##

# User Database

#

# Note that this file is consulted directly only when the system is running

# in single-user mode. At other times this information is provided by

# Open Directory.

#

# See the opendirectoryd(8) man page for additional information about

# Open Directory.

##

nobody:-2

root:0

daemon:1

\_uucp:4

\_taskgated:13

\_networkd:24

\_installassistant:25

\_lp:26

\_postfix:27

\_scsd:31

\_ces:32

\_appstore:33

\_mcxalr:54

\_appleevents:55

\_geod:56

\_devdocs:59

\_sandbox:60

\_mdnsresponder:65

\_ard:67

\_www:70

\_eppc:71

\_cvs:72

\_svn:73

\_mysql:74

\_sshd:75

\_qtss:76

\_cyrus:77

\_mailman:78

\_appserver:79

\_clamav:82

\_amavisd:83

\_jabber:84

\_appowner:87

\_windowserver:88

\_spotlight:89

\_tokend:91

\_securityagent:92

\_calendar:93

\_teamsserver:94

\_update\_sharing:95

\_installer:96

\_atsserver:97

\_trustd:282

\_oahd:441

student@admins-iMac-3 ~ %

**28.) Count the number of people logged in and also trap the users in a file using the tee command.**

student@admins-iMac-3 ~ % who | tee logged\_users.txt |wc -l

2

student@admins-iMac-3 ~ % ls

%cd capitals3 nano.save.2

1 capitals3.txt ne.txt

10 captials.text new.doc

234.txt case new.sh

3 case.sh new.txt

34 cat new1.txt

vit.txt

capitals1 mystates.txt vitnew.txt

capitals1.txt n.f1 yes

capitals123.txt naaz yes-ok

capitals2 naaz.txt you.doic

capitals2.text nano.save

capitals2.txt nano.save.1

student@admins-iMac-3 ~ %

**29.) Convert the contents of mystates into uppercase.**

student@admins-iMac-3 ~ % tr a-z A-Z <mystates

ASSAM

NAGALAND

SIKKIM

MEGHALAYA

MIZORAM

**30.) Create any two files & display the common values between them.**

student@admins-iMac-3 ~ % cat >cfile1

hello

my

name

is

durva

student@admins-iMac-3 ~ % cat >cfile2

hello

i

am

student@admins-iMac-3 ~ % sort cfile1 >scfile1

student@admins-iMac-3 ~ % sort cfile2 >scfile2

student@admins-iMac-3 ~ % comm scfile1 scfile2

am

durva

hello

i

is

my

name