Ex.No : 1   **BASICS of UNIX COMMANDS**
Date: 29.07.2024

Aim:

   To study basic UNIX commands.

1)   **Command : cat**

   a)   **To Create a New File:** *Syntax: cat > filename*
      [srm@srmlinux]$ cat **>**
      one.txtHi
      Welcome to CSE Lab
      SRM Institute of Science and Technology
      Tiruchirappalli
      Pressing Ctrl+z to save the file
      [2]+ Stopped   cat
      >one.txt[srm@srmlinux]$

   b)   **To Display the Contents of the File**
      :*Syntax : cat filename*
      [srm@srmlinux]$ cat one.txt
      Hi
      Welcome to CSE Lab
      SRM Institute of Science and Technology
      Tiruchirappalli
      [srm@srmlinux]$

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2)   **Command : mkdir (Make**
      directory)*Syntax : mkdir*
      filename [srm@srmlinux]$ mkdir
      programs[srm@srmlinux]$ ls
      a.out   college.txt fir.sh   new.txt
      second.shcol1.txt   coll.txt   firs.sh
                   one   pgmscollege2.txt file.txt
                   one.txt   **programs** [srm@srmlinux]$

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3)   **Command : cd (change directory)** *Syntax : cd directory name*
      [srm@srmlinux]$cd programs [srm@srmlinux programs]$ cd ..
      [srm@srmlinux]$ cd programs
      [srm@srmlinux programs]$ mkdir
      shellprogram[srm@srmlinux programs]$ cd
      shellprogram [srm@srmlinux shellprogram]$
      cd [srm@srmlinux]$

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4)   Command : pwd (Print Working Directory)

[srm@srmlinux shellprogram]$ pwd
/home/srm/programs/shellprogra
m   [srm@srmlinux
shellprogram]$ cd
[srm@srmlinux]$ pwd
/home/srm
[srm@srmlinux]
$

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5)   Command : ls (List Files and Directories)

a)   ls

[srm@srmlinux]$ ls
111   2.prn   cpgm.c   HelloWorld.class mac.c   print.c
1.ccc a.out   duplicate.c HelloWorld.java Makefile
sample.c1.docx array.c fib.c   inc.c   OS
      streverse.c
1.prn CP   fun.c   JAVA   pr.c
            vin[srm@srmlinux]$

b) ls –l : Lists Files and Directories in Long Listing Mode

[srm@srmlinux]$ ls
-ltotal 112
-rw-rw-r-- 1 srm srm 35 Jul 21 16:31 111 -rw-r--r--
1 srm srm   0 Sep 3 13:12 1.ccc
-rw-rw-r-- 1 srm srm 6857 Aug 9 16:30 1.docx
-rw-rw-r-- 1 srm srm 785 Jul 21 16:32 1.prn
-rw-rw-r-- 1 srm srm 166 Jul 21 16:33 2.prn
-rwxrwxr-x 1 srm srm 4777 Nov 22 11:00 a.out -rw-rw-
r-- 1 srm srm 346 Jul 15 2016 array.c drwxrwxr-x 2
srm srm 4096 Sep 2 13:22 CP -rw-rw-r-- 1 srm srm
81 Aug 3 16:47 cpgm.c
-rw-rw-r-- 1 srm srm 842 Aug 6 12:21 duplicate.c
-rw-rw-r-- 1 srm srm 265 Oct 31 13:26 fib.c
[srm@srmlinux]$

c) [srm@srmlinux]$ ls –a (To show Hidden files)

.   2.prn   .bashrc   fun.c   mac.c   sample.c
..   a.out   CP   .gnome2   Makefile .ssh
111   array.c   cpgm.c   HelloWorld.class .mozilla
streverse.c1.ccc .bash_history duplicate.c HelloWorld.java OS
      .vim 1.docx .bash_logout .emacs   inc.c pr.c

2

.viminfo

1.prn .bash_profile fib.c   JAVA   print.c vin [srm@srmlinux]$

d) [srm@srmlinux]$ ls –x

111   1.ccc   1.docx 1.prn   2.prn
           a.out array.cCP   cpgm.c
duplicate.c fib.c   fun.c
HelloWorld.class HelloWorld.java inc.c   JAVA   mac.c   Makefile
OS   pr.c   print.c sample.c   streverse.c vin
[srm@srmlinux]$

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6) **Command : mv (Move)**

a) **mv (Move a File to Directory)** *Syntax : mv*
   SourceFileDestinationDirectory
[srm@srmlinux]$ mv coll.txt
programs[srm@srmlinux]$
cd programs [srm@srmlinux
programs]$ ls
coll.txt
           she
llprogram
[srm@srmlinux
programs]$

b) **mv (Move Contents of one File to**
Another File)_Syntax : mv SourceFile_
DestinationFile [srm@srmlinux]$ cat
one.txt
Hi, Welcome to CSE Lab
SRM Institute of Science and Technology
[srm@srmlinux]$ mv one.txt new.txt
[srm@srmlinux]$ cat new.txt
Hi, Welcome to CSE Lab
SRM Institute of Science and Technology
[srm@srmlinux]$

7) **Command : rm**
(Remove a File)_Syntax :_
rm filename
[srm@srmlinux]$ ls
a.out   college2.txt file.txt firs.sh one
programs col1.txt college.txt fir.sh
     new.txt pgms second.sh
[srm@srmlinux]$ rm new.txt
[srm@srmlinux]$ ls
a.out   college2.txt file.txt firs.sh pgms
     second.shcol1.txt college.txt fir.sh
     one   programs

3

[srm@srmlinux]$

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8) **Command : rmdir (Remove a Diretory)** *Syntax : rmdir Directoryname* [srm@srmlinux programs]$ ls
coll.txt **shellprogram**
[srm@srmlinux programs]$ rmdir
shellprogram[srm@srmlinux programs]$ ls
coll.txt
[srm@srmlinux programs]$

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9) **Command : rm -rf (Remove a Diretory which is not Empty)**

   Syntax : rm –rf Directoryname[srm@srmlinux programs]$ ls coll.txt
[srm@srmlinux]$ rm -rf
programs
[srm@srmlinux]$ ls
a.out   college2.txt file.txt firs.sh
pgms col1.txt college.txt   fir.sh
        one
        second.sh[srm@srmlinux]$

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10) **Command : echo (Prints the Given String)**
    a) Syntax: echo "String"
    [srm@srmlinux]$ echo "SRM Institute of Science and Technology"
    SRM Institute of Science and Technology
    [srm@srmlinux]$
    b) Syntax: echo –n "String" (Don't Print a New Line)
    [srm@srmlinux]$ echo -n "SRM Institute of Science and Technology" SRMInstitute of Science and Technology
    [srm@srmlinux]$

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11) **Command : head (Prints required no. of lines in the File Counting from theBeginning of the File)** *Syntax : head –n filename n :* Number of
    Lines to be displayed
    [srm@srmlinux]$ cat one.txt
    Welcome to SRM Institute of Science and
    TechnologyTiruchirappalli
    CSE Dept
    Computer Practices

Laboratory
[srm@srmlinux]$ head -2
one.txt
Welcome to SRM Institute of Science and
TechnologyTiruchirappalli
[srm@srmlinux]$

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12) **Command : tail (Prints required no. of lines in the File Counting fromthe End of the File)** <u>*Syntax :*</u> *tail –n filename*

n *:* Number of Lines to be
displayed
[srm@srmlinux]$ cat
one.txt
Welcome to SRM Institute of Science and
TechnologyTiruchirappalli
CSE Dept
Computer   Practices
Laboratory
[srm@srmlinux]$ tail
-2 one.txtCSE Dept
Computer Practices
 Laboratory
 [srm@srmlinux]$

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13) **Command : who (Displays the Users Who Logged into the System)**
    Syntax: who [srm@srmlinux]$ who
root   tty7   2015-01-06 02:14 (:0) srm   pts/20   2016-
12-01 16:07 (172.16.67.30) [srm@srmlinux]$

Command : who am i (Displays the Name of the Current User of thisSystem)
    Syntax: who am i
[srm@srmlinux]$ who am i
   srm pts/20   2016-12-01 16:07 (172.16.67.30)
   [srm@srmlinux]$

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14) **Command : date (Displays the Current Date and Time)**
   Syntax: date
   [srm@srmlinux]$ date
 Thu Dec 1 16:07:49 IST 2016
   [srm@srmlinux]$

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15) **Command : cal (Displays the Calendar)**

   Syntax: cal

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[srm@srmlinux
]$ cal
[srm@srmlinux
]$ calDecember
2016
Su Mo Tu We Th Fr Sa
         1  2  3
 4  5  6  7  8 9 10
11 12 13 14 15 16 17
18 19 20 21 22 23 24
25 26 27 28 29 30 31


   [srm@srmlinux]$ cal 5 2009
     May 2009
Su Mo Tu We Th Fr Sa
                1  2
 3  4  5  6  7 8  9
10 11 12  13 14 15 16
17 18 19  20 21 22 23
24 25 26  27 28 29 30
31
```

16) **Command : grep (Displays a Line from the file Containing the Given String)**

Syntax : grep "String"
filename Syntax : grep –i
"String" filename i
– Ignore Case of the Given String
[srm@srmlinux]$ cat one.txt
Welcome to SRM Institute of Science and
TechnologyTiruchirappalli
CSE Dept
Computer Practices Laboratory
[srm@srmlinux]$ grep "SRM"
one.txt
Welcome to SRM Institute of Science and Technology