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ROLL.N0:62

SE-4-D

DATE:1/03/2021

EXPERIMENT N0-1

Aim: Explore usage of basic Linux Commands and system calls for file, directory and process management

OUTPUT:

```
harsh@harsh-virtual-machine: ~/d1
File Edit View Search Terminal Help
harsh@harsh-virtual-machine:~$ pwd
/home/harsh
harsh@harsh-virtual-machine:~$ cd d1
harsh@harsh-virtual-machine:~/d1$ mkdir file1
harsh@harsh-virtual-machine:~/d1$ ls
ass1 ass2 ass3 d4 file1 m
harsh@harsh-virtual-machine:~/d1$ date
Tue Mar 2 12:18:30 IST 2021
harsh@harsh-virtual-machine:~/d1$ rmdir
rmdir: missing operand
Try 'rmdir --help' for more information.
harsh@harsh-virtual-machine:~/d1$ rmdir d4
harsh@harsh-virtual-machine:~/d1$ ls
ass1 ass2 ass3 file1 m
harsh@harsh-virtual-machine:~/d1$ mv ass3 file1
harsh@harsh-virtual-machine:~/d1$ ls
ass1 ass2 file1 m
harsh@harsh-virtual-machine:~/d1$ cat ass1
hi my name is harsh
harsh@harsh-virtual-machine:~/d1$ echo user
user
harsh@harsh-virtual-machine:~/d1$ whereis cat
cat: /bin/cat /usr/share/man/man1/cat.1.gz
harsh@harsh-virtual-machine:~/d1$ more ass1
hi my name is harsh
harsh@harsh-virtual-machine:~/d1$ wc ass1
 1  5 20 ass1
harsh@harsh-virtual-machine:~/d1$ wc-l ass1
wc-l: command not found
harsh@harsh-virtual-machine:~/d1$
```

```
Activities Terminal Tue 14:45
harsh@harsh-virtual-machine: ~/d1
File Edit View Search Terminal Help
harsh@harsh-virtual-machine:~$ cd d1
harsh@harsh-virtual-machine:~/d1$ ls
ass1 ass2 file1 m
harsh@harsh-virtual-machine:~/d1$ head ass1
hi my name is harsh
harsh@harsh-virtual-machine:~/d1$ head m
NAME: SOLANKI HARSH
SE4-D-62
SAKEC
harsh@harsh-virtual-machine:~/d1$ wc -l m
4 m
harsh@harsh-virtual-machine:~/d1$ tail m
NAME: SOLANKI HARSH
SE4-D-62
SAKEC
harsh@harsh-virtual-machine:~/d1$ cal
      March 2021
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
harsh@harsh-virtual-machine:~/d1$
```

```
Activities Terminal Tue 14:49
harsh@harsh-virtual-machine: ~/d1
File Edit View Search Terminal Help
harsh@harsh-virtual-machine:~$ date
Tue Mar  2 14:46:37 IST 2021
harsh@harsh-virtual-machine:~$ who
harsh      :0                2021-03-02 14:39 (:0)
harsh@harsh-virtual-machine:~$ whoami
harsh
harsh@harsh-virtual-machine:~$ cd d1
harsh@harsh-virtual-machine:~/d1$ chmod 745 m
harsh@harsh-virtual-machine:~/d1$ cmp m harsh
cmp: harsh: No such file or directory
harsh@harsh-virtual-machine:~/d1$ cmp m ass1
m ass1 differ: byte 1, line 1
harsh@harsh-virtual-machine:~/d1$ comm m ass1
      hi my name is harsh
NAME: SOLANKI HARSH
SE4-D-62
comm: file 1 is not in sorted order
SAKEC
harsh@harsh-virtual-machine:~/d1$ diff m ass1
1,4c1
< NAME: SOLANKI HARSH
< SE4-D-62
< SAKEC
<
---
> hi my name is harsh
harsh@harsh-virtual-machine:~/d1$
```

```
Activities Terminal Tue 14:58
harsh@harsh-virtual-machine: ~/d1
File Edit View Search Terminal Help
harsh@harsh-virtual-machine:~$ cd d1
harsh@harsh-virtual-machine:~/d1$ mkdir d3
harsh@harsh-virtual-machine:~/d1$ ls
ass1 d3 file1 m
harsh@harsh-virtual-machine:~/d1$ mv d3 file1
harsh@harsh-virtual-machine:~/d1$ ls
ass1 file1 m
harsh@harsh-virtual-machine:~/d1$ ln ass1 m
ln: failed to create hard link 'm': File exists
harsh@harsh-virtual-machine:~/d1$ stat m
  File: m
  Size: 36          Blocks: 8          IO Block: 4096   regular file
Device: 801h/2049d Inode: 1316971      Links: 1
Access: (0745/-rwxr--r-x)  Uid: ( 1000/   harsh)  Gid: ( 1000/   harsh)
Access: 2021-03-02 14:48:10.230207154 +0530
Modify: 2021-03-02 14:41:43.696585228 +0530
Change: 2021-03-02 14:47:45.770228693 +0530
Birth: -
harsh@harsh-virtual-machine:~/d1$
```

```
Activities Terminal Tue 14:58
harsh@harsh-virtual-machine: ~
File Edit View Search Terminal Help
harsh@harsh-virtual-machine:~$ stat / home / d1
  File: /
  Size: 4096          Blocks: 8          IO Block: 4096   directory
Device: 801h/2049d   Inode: 2          Links: 24
Access: (0755/drwxr-xr-x)  Uid: (   0/   root)  Gid: (   0/   root)
Access: 2021-03-01 18:28:23.679369893 +0530
Modify: 2021-02-28 18:27:44.773546084 +0530
Change: 2021-02-28 18:27:44.773546084 +0530
Birth: -
stat: cannot stat 'home': No such file or directory
  File: /
  Size: 4096          Blocks: 8          IO Block: 4096   directory
Device: 801h/2049d   Inode: 2          Links: 24
Access: (0755/drwxr-xr-x)  Uid: (   0/   root)  Gid: (   0/   root)
Access: 2021-03-01 18:28:23.679369893 +0530
Modify: 2021-02-28 18:27:44.773546084 +0530
Change: 2021-02-28 18:27:44.773546084 +0530
Birth: -
  File: d1
  Size: 4096          Blocks: 8          IO Block: 4096   directory
Device: 801h/2049d   Inode: 1316318     Links: 3
Access: (0755/drwxr-xr-x)  Uid: ( 1000/   harsh)  Gid: ( 1000/   harsh)
Access: 2021-03-02 14:57:22.077747034 +0530
Modify: 2021-03-02 14:57:20.589706375 +0530
Change: 2021-03-02 14:57:20.589706375 +0530
Birth: -
harsh@harsh-virtual-machine:~$
```

Activities Terminal Tue 15:01

harsh@harsh-virtual-machine: ~/d1

File Edit View Search Terminal Help

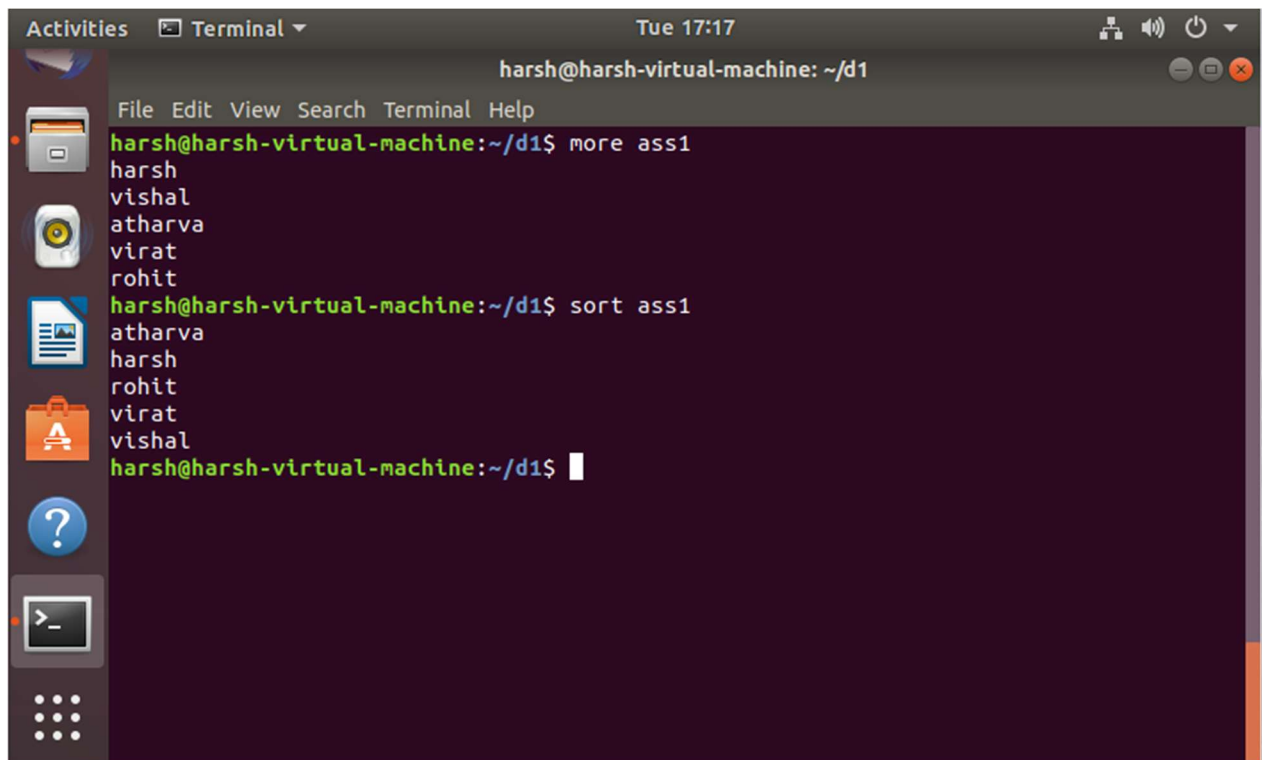
```
harsh@harsh-virtual-machine:~$ cd d1
harsh@harsh-virtual-machine:~/d1$ ls
ass1 file1 m
harsh@harsh-virtual-machine:~/d1$ grep --color=always harsh ass1
hi my name is harsh
harsh@harsh-virtual-machine:~/d1$ grep--color=always SAKEC m
grep--color=always: command not found
harsh@harsh-virtual-machine:~/d1$
```

Activities Terminal Tue 17:17

harsh@harsh-virtual-machine: ~/d1

File Edit View Search Terminal Help

```
harsh@harsh-virtual-machine:~/d1$ cat ass1
harsh
vishal
atharva
virat
rohit
harsh@harsh-virtual-machine:~/d1$ cat m
hi
my
name
is
harsh
harsh@harsh-virtual-machine:~/d1$ wc -l ass1|tee -a m
5 ass1
harsh@harsh-virtual-machine:~/d1$ cat m
hi
my
name
is
harsh
5 ass1
```



The image shows a terminal window titled "harsh@harsh-virtual-machine: ~/d1". The window has a menu bar with "File", "Edit", "View", "Search", "Terminal", and "Help". On the left side, there is a vertical dock with icons for a file manager, a terminal, a help icon, and a grid of application icons. The terminal output shows the following commands and results:

```
harsh@harsh-virtual-machine:~/d1$ more ass1
harsh
vishal
atharva
virat
rohit
harsh@harsh-virtual-machine:~/d1$ sort ass1
atharva
harsh
rohit
virat
vishal
harsh@harsh-virtual-machine:~/d1$
```