

LINUX LAB

DEVIPRIYA S
17MIS1176

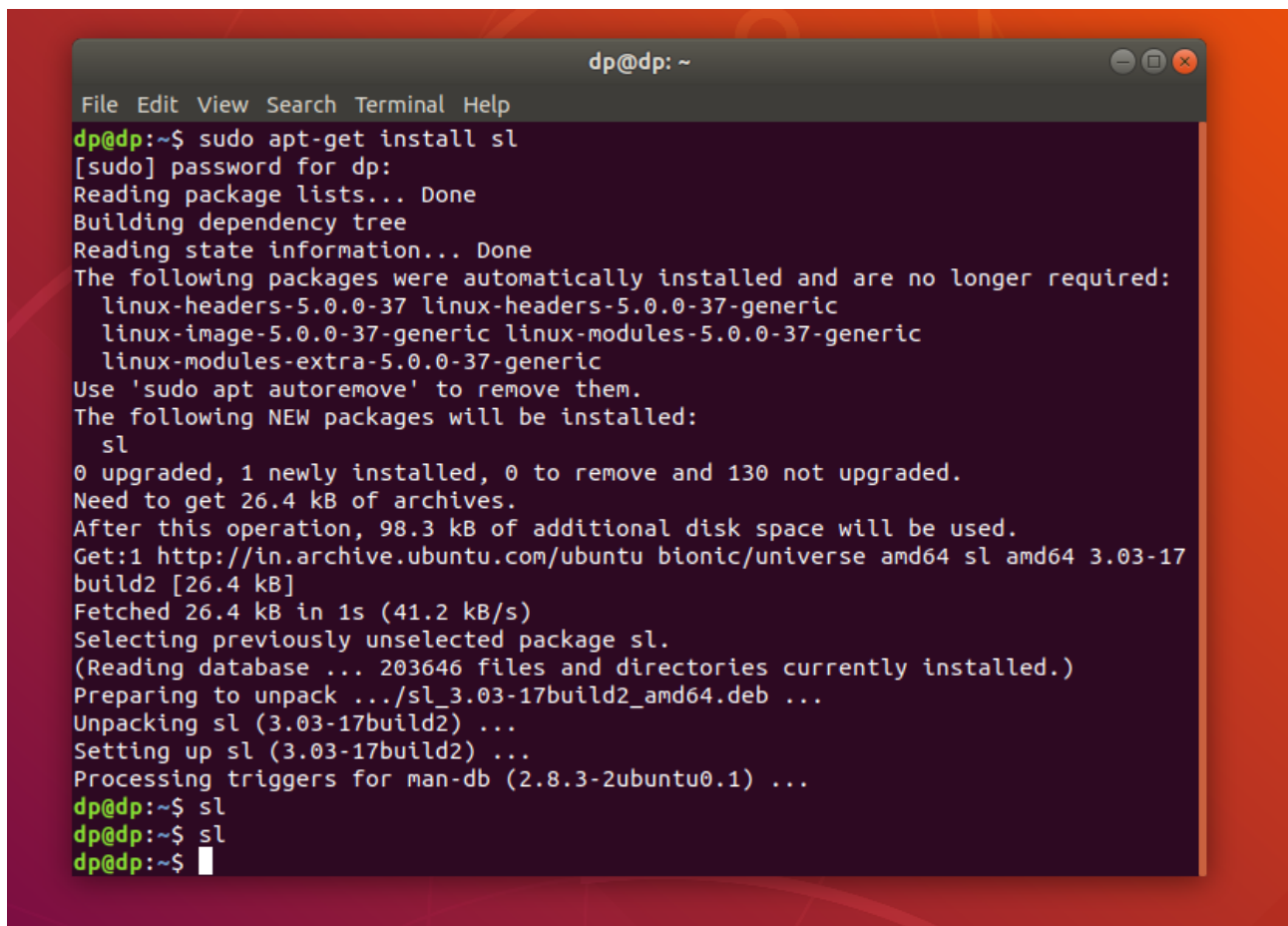
1) SL:

code:

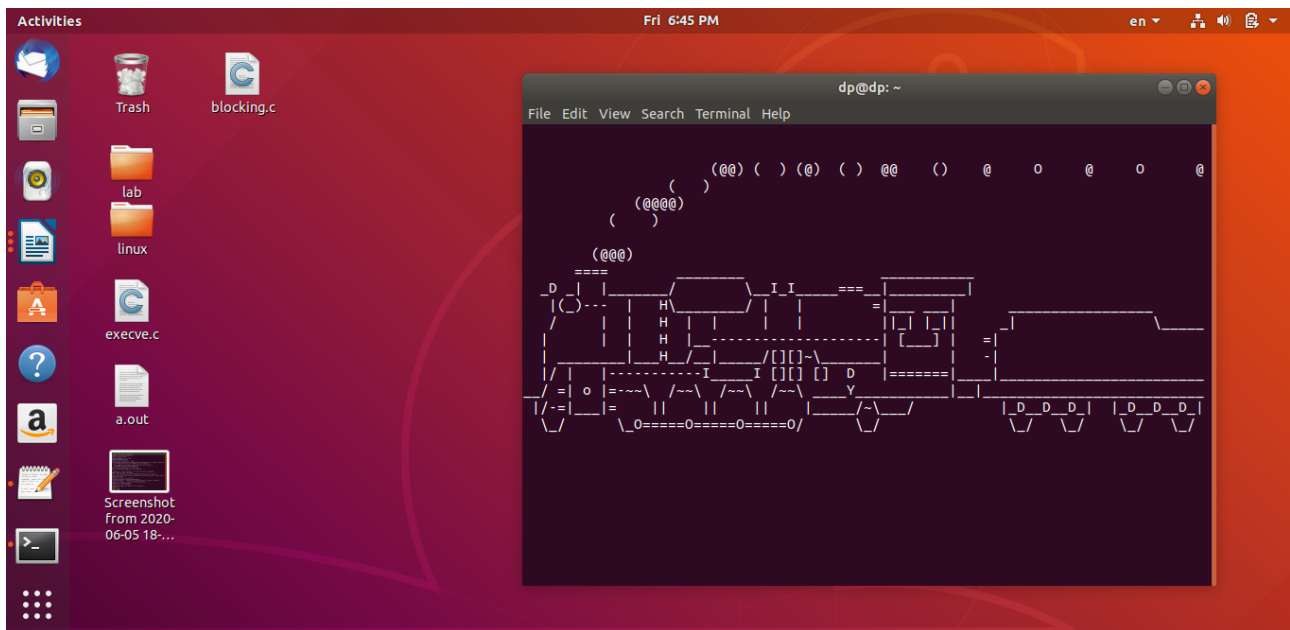
```
sudo apt-get install sl  
sl
```

EXPLANATION:

sl is just a fun command when you install the package and execute sl in terminal a train like structure will move in your terminal.



```
dp@dp: ~  
File Edit View Search Terminal Help  
dp@dp:~$ sudo apt-get install sl  
[sudo] password for dp:  
Reading package lists... Done  
Building dependency tree  
Reading state information... Done  
The following packages were automatically installed and are no longer required:  
  linux-headers-5.0.0-37 linux-headers-5.0.0-37-generic  
  linux-image-5.0.0-37-generic linux-modules-5.0.0-37-generic  
  linux-modules-extra-5.0.0-37-generic  
Use 'sudo apt autoremove' to remove them.  
The following NEW packages will be installed:  
  sl  
0 upgraded, 1 newly installed, 0 to remove and 130 not upgraded.  
Need to get 26.4 kB of archives.  
After this operation, 98.3 kB of additional disk space will be used.  
Get:1 http://in.archive.ubuntu.com/ubuntu bionic/universe amd64 sl amd64 3.03-17  
build2 [26.4 kB]  
Fetched 26.4 kB in 1s (41.2 kB/s)  
Selecting previously unselected package sl.  
(Reading database ... 203646 files and directories currently installed.)  
Preparing to unpack .../sl_3.03-17build2_amd64.deb ...  
Unpacking sl (3.03-17build2) ...  
Setting up sl (3.03-17build2) ...  
Processing triggers for man-db (2.8.3-2ubuntu0.1) ...  
dp@dp:~$ sl  
dp@dp:~$ sl  
dp@dp:~$
```



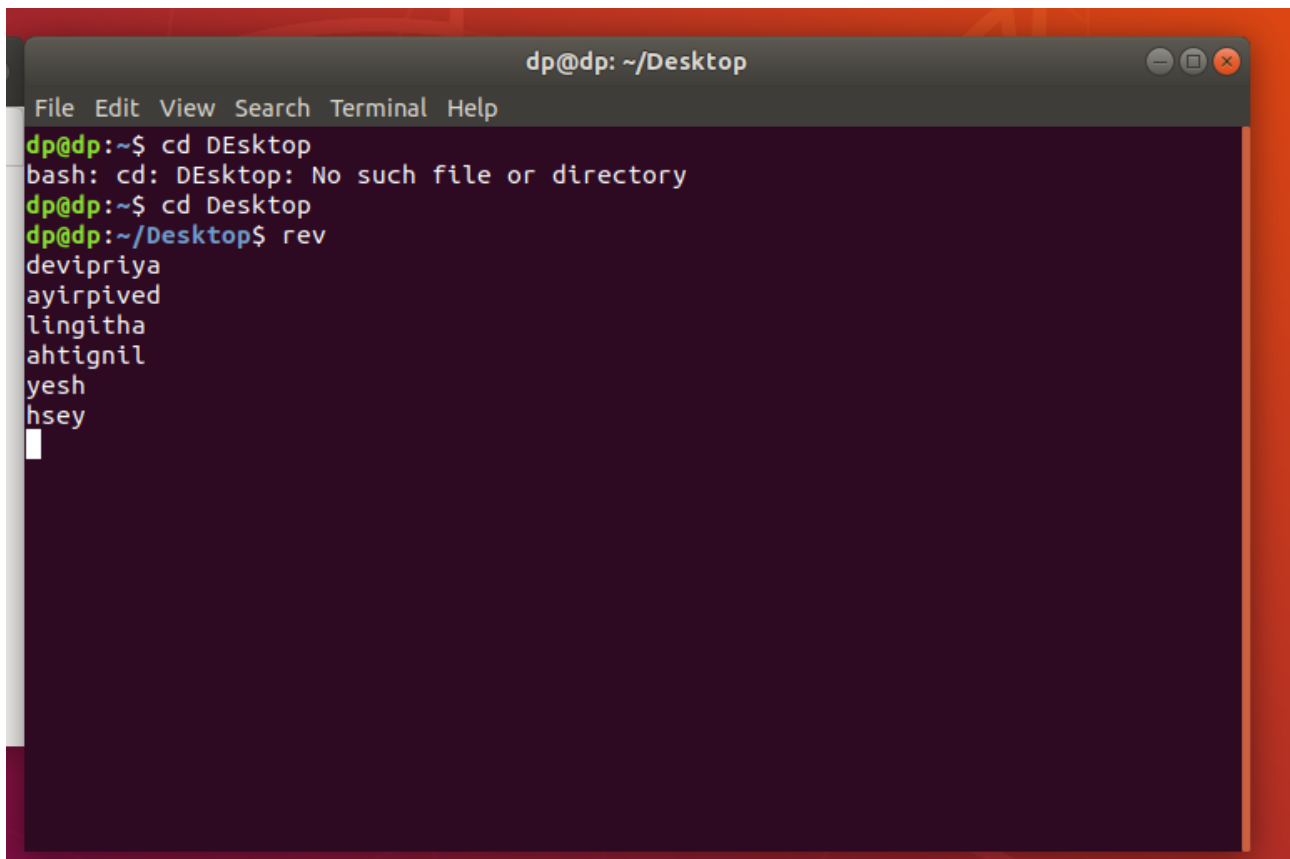
2) SCRIPT1.SH

CODE:

rev

EXPLANATION:

the command “rev” is used to reverse the lines. Once it is executed it will prompt for you to enter any word and when you press enter the word will be reversed and displayed.

A terminal window titled 'dp@dp: ~/Desktop' with a menu bar (File, Edit, View, Search, Terminal, Help). The terminal shows the following commands and outputs:

```
dp@dp:~$ cd Desktop
bash: cd: Desktop: No such file or directory
dp@dp:~$ cd Desktop
dp@dp:~/Desktop$ rev
devipriya
ayirpived
lingitha
ahtignil
yesh
hsey
█
```

3) Write a bash script to monitor health of the system.

Health.sh:

```
vmstat 1200 > vmstat1.data
filename= "/home/srihari/vmstat1.data"
tail -f $filename |
while read $line do
if [ (cat vmstat1.data | grep "swap")>0 ]
then
echo "some rogue process has consumed massive amounts of memory"> swap.txt
fi
if [ (cat vmstat1.data | grep "r")>1 ]
then
echo "some process are waiting to execute"> runqueue.txt
fi
if [ (cat vmstat1.data | grep "cpu")>1000 ]
then
echo "cpu usage is more"> cpu.txt
fi
End
```

EXPLANATION:

the vmstat 1200 – monitors every 24 hours and puts the data into the vmstat1.data

grep “swap”- the swap should always be zero if its not then some process has consumed massive memory. That will be monitored in this line

grep “r”- the running queue is constantly above process 1 it indicates the system is slow and some process is waiting to be executed. That will be monitored here.

Grep “cpu”- it indicates the cpu usage of the system. If the cpu usage is more it will be monitored and will alert in this line.