LINUX PROGRAMMING

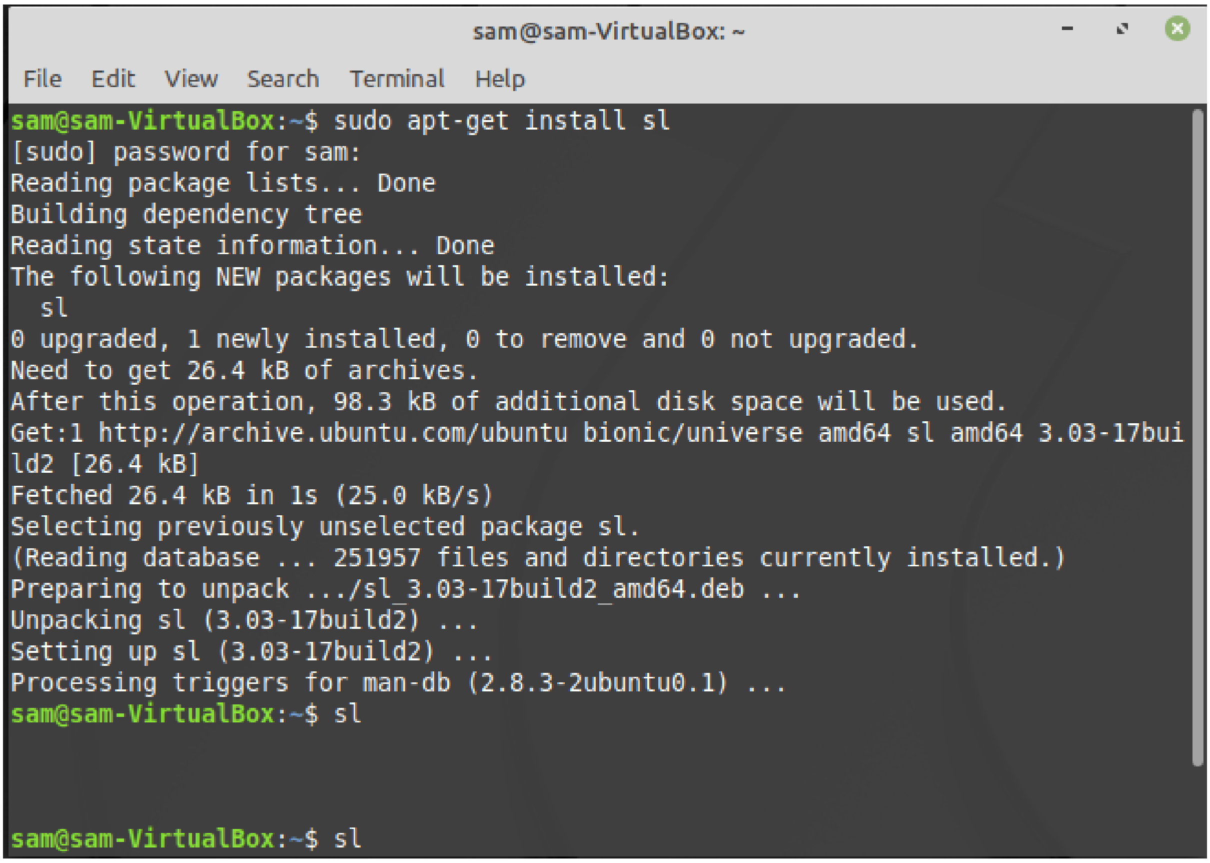
NAME: SAMYUGDHA.S

REGNO: 17MIS1118

1. sl

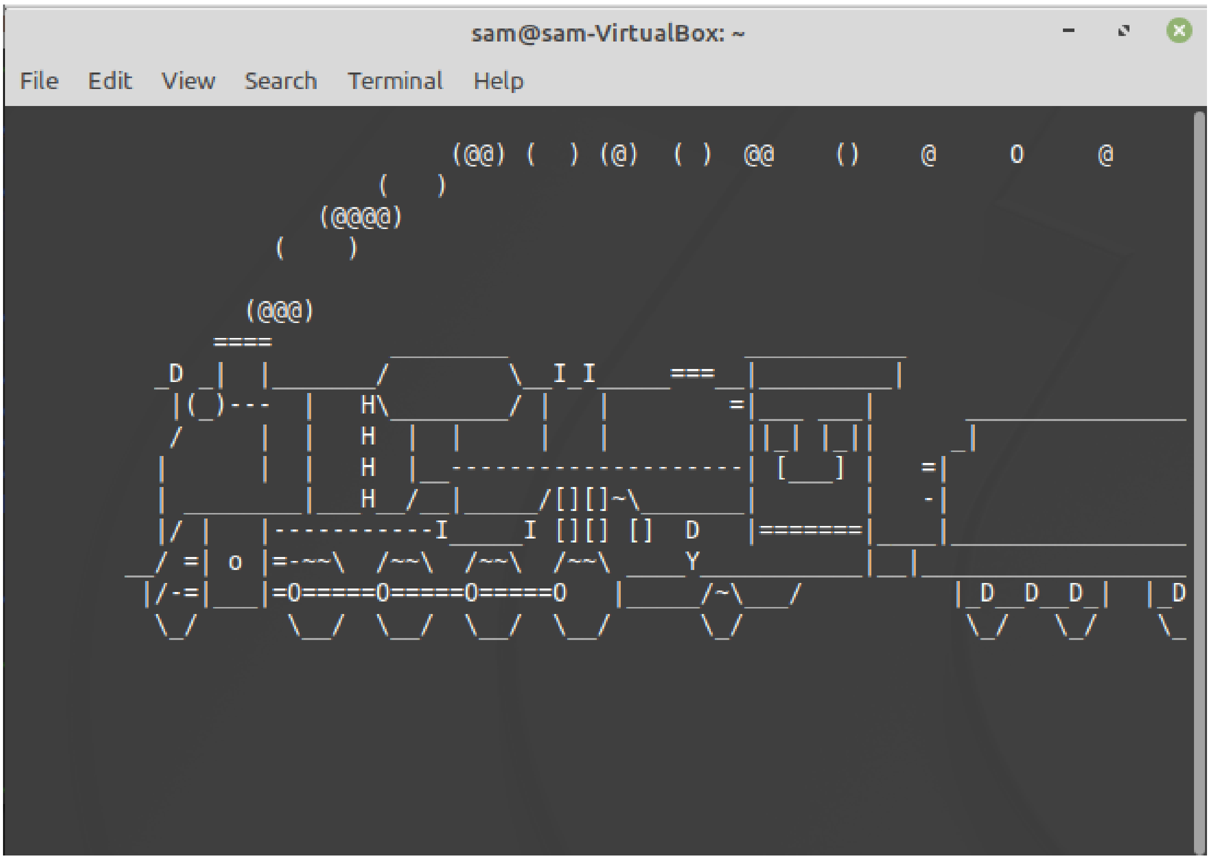
sudo apt-get install sl

sl.sh
sl



```
sam@sam-VirtualBox:~$ sudo apt-get install sl
[sudo] password for sam:
Reading package lists... Done
Building dependency tree
Reading state information... Done
The following NEW packages will be installed:
  sl
0 upgraded, 1 newly installed, 0 to remove and 0 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://archive.ubuntu.com/ubuntu bionic/universe amd64 sl amd64 3.03-17bui
ld2 [26.4 kB]
Fetched 26.4 kB in 1s (25.0 kB/s)
Selecting previously unselected package sl.
(Reading database ... 251957 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) ...
sam@sam-VirtualBox:~$ sl


sam@sam-VirtualBox:~$ sl
```



```
                              (@@) (  ) (@)  ( )  @@    ()    @     O     @
                         (   )
                     (@@@@)
                  (    )

                (@@@)
              ====        ________                ___________
          _D _|  |_______/        \__I_I_____===__|_________|
           |(_)---  |   H\________/ |   |        =|___ ___|       _______________
           /     |  |   H  |  |     |   |         ||_| |_||      _|
          |      |  |   H  |__--------------------| [___] |    =|
          | ________|___H__/__|_____/[][]~\_______|       |    -|
          |/ |   |-----------I_____I [][] []  D   |=======|__ __|________________
        __/ =| o |=-~~\  /~~\  /~~\  /~~\ ____Y___________|__ |__________________
         |/-=|___|=O=====O=====O=====O   |_____/~\___/           |_D__D__D_|  |_D
          \_/      \__/  \__/  \__/  \__/      \_/                \_/   \_/    \_
```

2.

Commands:

rev

Factor

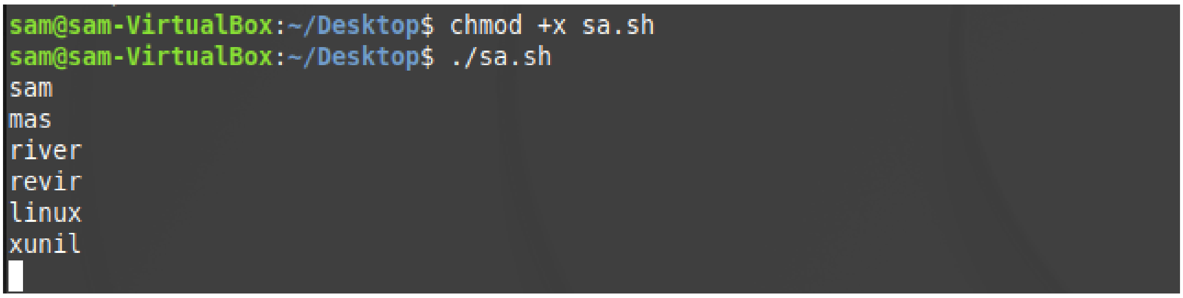
yes

sa.sh

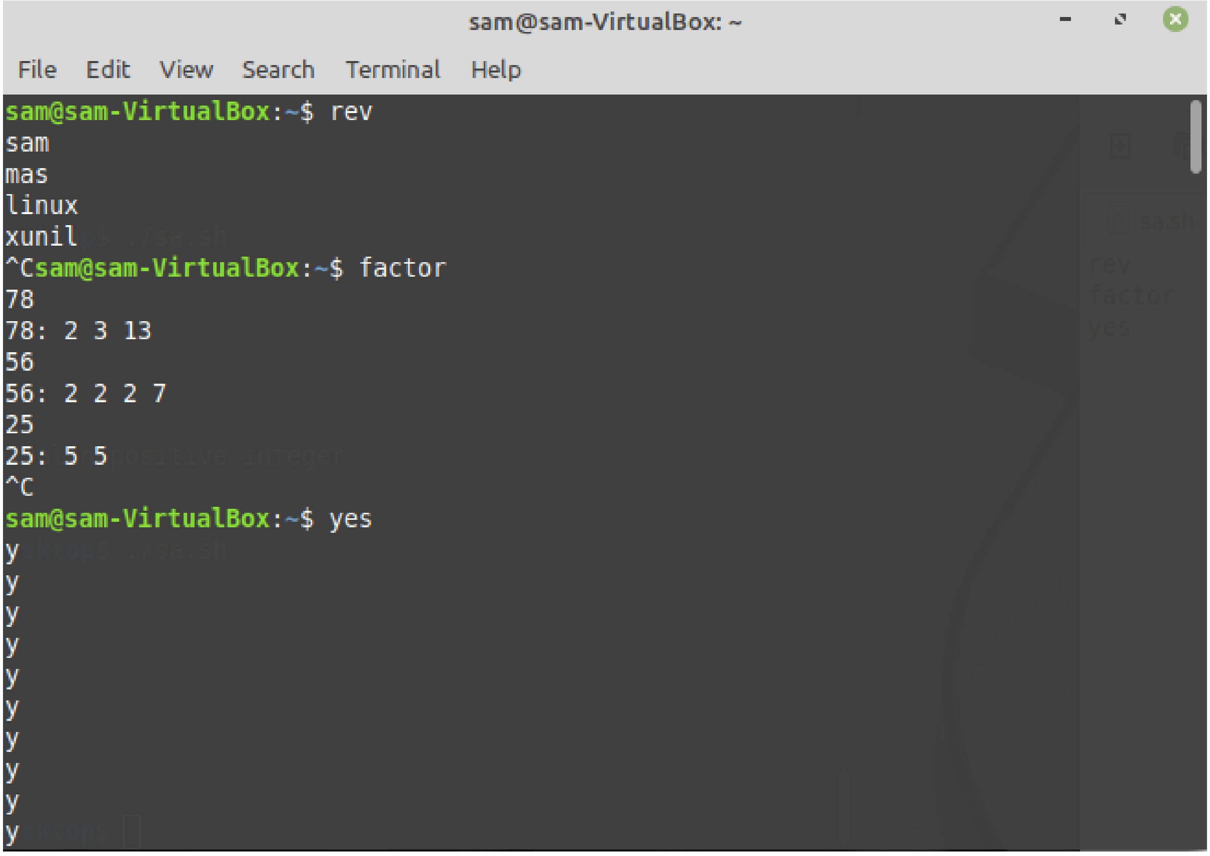
rev

factor

yes



```
sam@sam-VirtualBox:~/Desktop$ chmod +x sa.sh
sam@sam-VirtualBox:~/Desktop$ ./sa.sh
sam
mas
river
revir
linux
xunil
█
```



```
sam@sam-VirtualBox:~$ rev
sam
mas
linux
xunil
^Csam@sam-VirtualBox:~$ factor
78
78: 2 3 13
56
56: 2 2 2 7
25
25: 5 5
^C
sam@sam-VirtualBox:~$ yes
y
y
y
y
y
y
y
y
y
y
```

3.

Write a bash shell script to monitor the health of your system. Let the details be stored and archived in any folder of your choice.

vmstat 1200 > ss.data

filename= "/home/sam/Desktop/ss.data"

tail -f $filename |

while read $line do

if [(cat ss.data | grep "swap")>0]

then

 echo "some rogue process has consumed massive amounts of memory"> swap.txt

fi

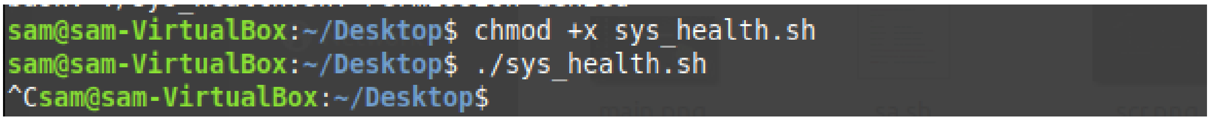
if [(cat ss.data | grep "r")>1]

then

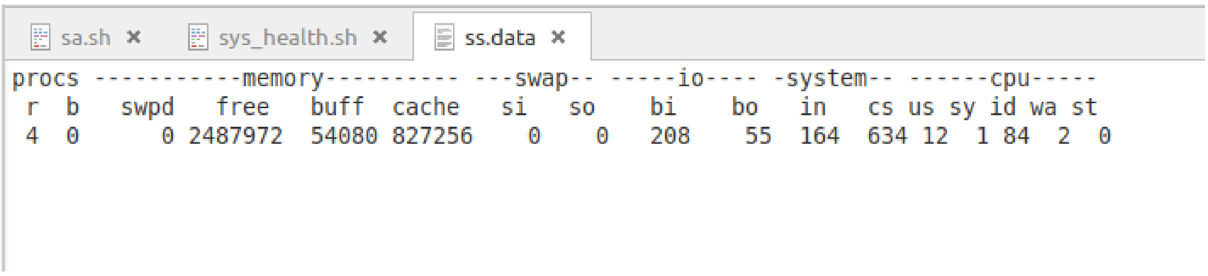
 echo "some process are waiting to execute"> runqueue.txt

fi

```
if [ (cat ss.data | grep "cpu")>1000  ]
then
 echo "cpu usage is more"> cpu.txt
fi
End
```



```
sam@sam-VirtualBox:~/Desktop$ chmod +x sys_health.sh
sam@sam-VirtualBox:~/Desktop$ ./sys_health.sh
^Csam@sam-VirtualBox:~/Desktop$
```



```
procs -----------memory---------- ---swap-- -----io---- -system-- ------cpu-----
 r  b   swpd   free   buff  cache   si   so    bi    bo   in   cs us sy id wa st
 4  0      0 2487972  54080 827256    0    0   208    55  164  634 12  1 84  2  0
```

GITHUB LINK:

https://github.com/samyugdhas/sl_system_health_monitor