Ganpat University
Faculty of Engineering & Technology
Computer Science & Engineering
(2CSE204) Basics of Operating System and Shell Scripting

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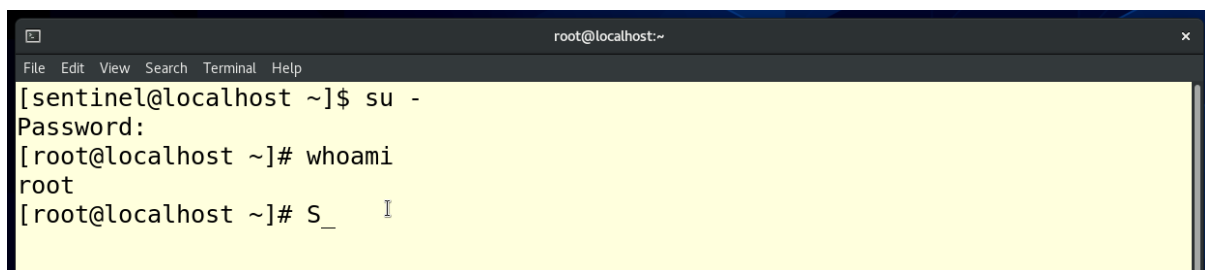
Enrollment No: 23162171007

Sem – 2

Branch: CS

Class: B

Batch: 25

Practical 1

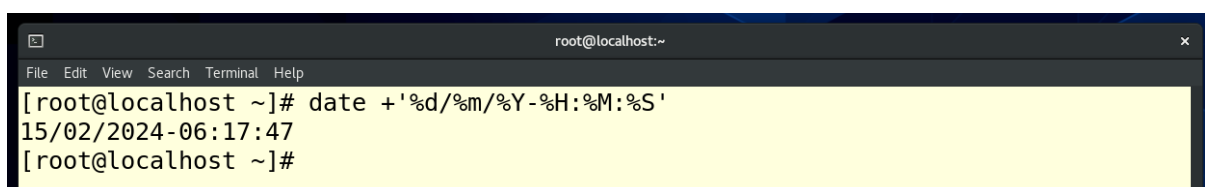1. From student user, change the user to root and identify which user is currently logged in?

Command: su - and whoami

2. Display current date and time in following format: **dd/mm/yyyy-hh:mm:ss**
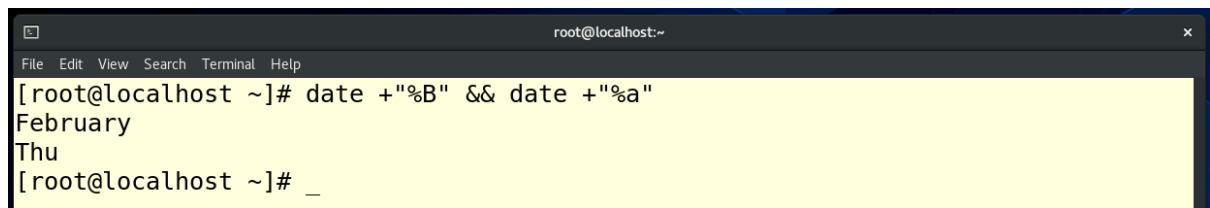
Command: date +'%d/%m/%Y-%H:%M:%S'

3. Using multiple commands in one line only, display current month name in full and day in abbreviated format.

Command: date +"%B" && date +"%a"
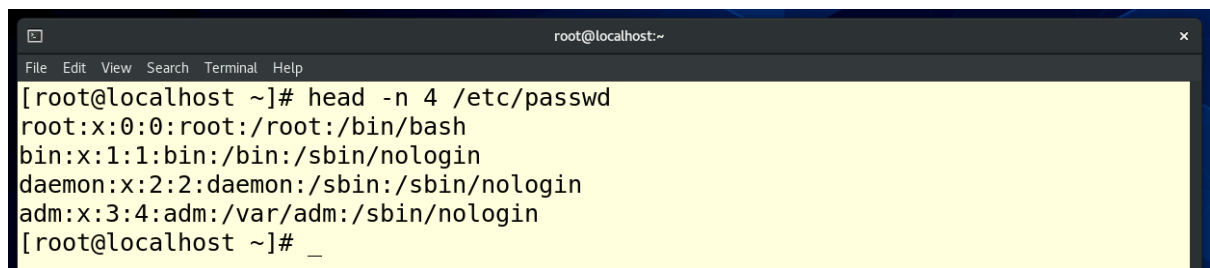
```
                                    root@localhost:~                                    ×
File  Edit  View  Search  Terminal  Help
[root@localhost ~]# date +"%B" && date +"%a"
February
Thu
[root@localhost ~]# _
```

4. Display first 4 lines of /etc/yum.repos.d/rhel_dvd.repo file

Command: head -n 4 /etc/passwd
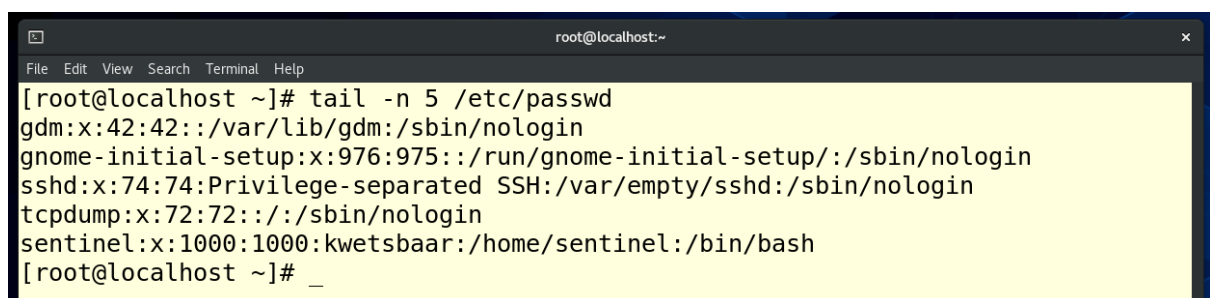
```
                                    root@localhost:~                                    ×
File  Edit  View  Search  Terminal  Help
[root@localhost ~]# head -n 4 /etc/passwd
root:x:0:0:root:/root:/bin/bash
bin:x:1:1:bin:/bin:/sbin/nologin
daemon:x:2:2:daemon:/sbin:/sbin/nologin
adm:x:3:4:adm:/var/adm:/sbin/nologin
[root@localhost ~]# _
```

5. Display last 5 lines of /etc/yum.repos.d/rhel_dvd.repo file

Command: tail -n 4 /etc/passwd
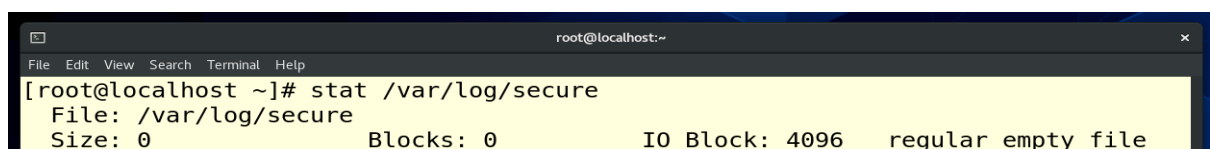
```
                                    root@localhost:~                                    ×
File  Edit  View  Search  Terminal  Help
[root@localhost ~]# tail -n 5 /etc/passwd
gdm:x:42:42::/var/lib/gdm:/sbin/nologin
gnome-initial-setup:x:976:975::/run/gnome-initial-setup/:/sbin/nologin
sshd:x:74:74:Privilege-separated SSH:/var/empty/sshd:/sbin/nologin
tcpdump:x:72:72::/:/sbin/nologin
sentinel:x:1000:1000:kwetsbaar:/home/sentinel:/bin/bash
[root@localhost ~]# _
```

6. How many bytes are occupied by /var/log/secure file?

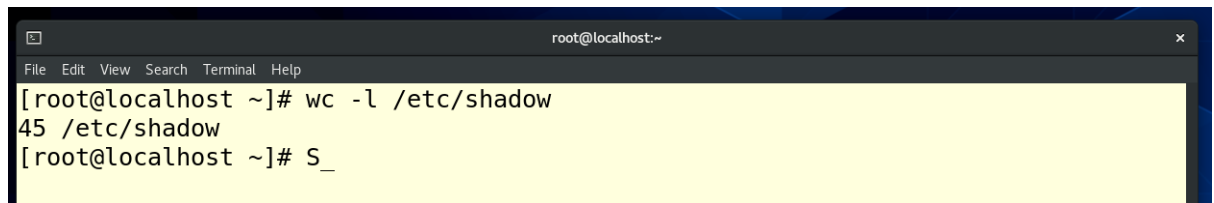Command: state /var/log/secure, or we can use ls -l

```
                                    root@localhost:~                                    ×
File  Edit  View  Search  Terminal  Help
[root@localhost ~]# stat /var/log/secure
  File: /var/log/secure
  Size: 0            Blocks: 0          IO Block: 4096    regular empty file
```

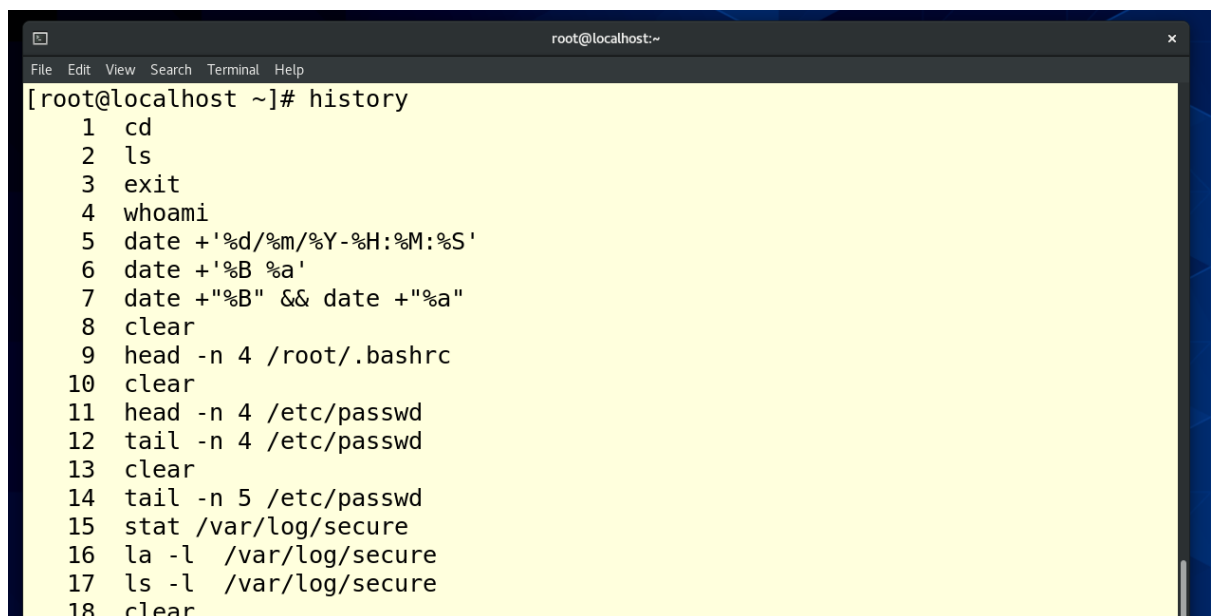7. How many lines of content is present in /etc/shadow file?
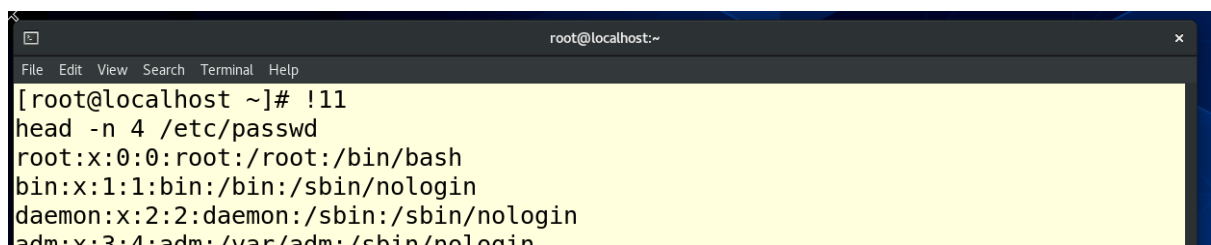
   Command: wc -l /etc/shadow

```
┌─                                     root@localhost:~                                  ×
 File  Edit  View  Search  Terminal  Help
[root@localhost ~]# wc -l /etc/shadow
45 /etc/shadow
[root@localhost ~]# S_
```

8. List all the commands executed by you so far and execute the 10ᵗʰ command.

Command: history , for 10th command "!10" (in my case 10th command was clear so I execute 11ᵗʰ command)

```
┌─                                     root@localhost:~                                  ×
 File  Edit  View  Search  Terminal  Help
[root@localhost ~]# history
    1  cd
    2  ls
    3  exit
    4  whoami
    5  date +'%d/%m/%Y-%H:%M:%S'
    6  date +'%B %a'
    7  date +"%B" && date +"%a"
    8  clear
    9  head -n 4 /root/.bashrc
   10  clear
   11  head -n 4 /etc/passwd
   12  tail -n 4 /etc/passwd
   13  clear
   14  tail -n 5 /etc/passwd
   15  stat /var/log/secure
   16  la -l  /var/log/secure
   17  ls -l  /var/log/secure
   18  clear
```
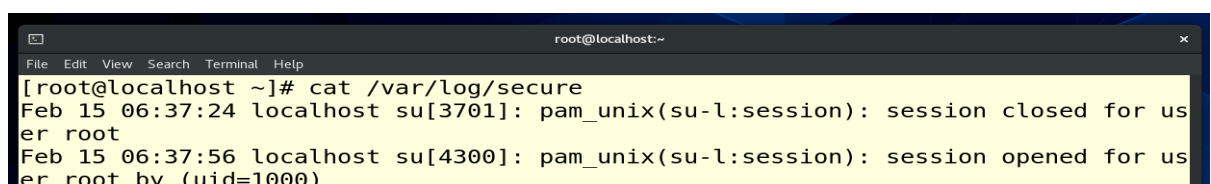
```
┌─                                     root@localhost:~                                  ×
 File  Edit  View  Search  Terminal  Help
[root@localhost ~]# !11
head -n 4 /etc/passwd
root:x:0:0:root:/root:/bin/bash
bin:x:1:1:bin:/bin:/sbin/nologin
daemon:x:2:2:daemon:/sbin:/sbin/nologin
adm:x:3:4:adm:/var/adm:/sbin/nologin
```

9. Display the contents of /var/log/secure file. - Command: cat /var/log/secure

```
┌─                                     root@localhost:~                                  ×
 File  Edit  View  Search  Terminal  Help
[root@localhost ~]# cat /var/log/secure
Feb 15 06:37:24 localhost su[3701]: pam_unix(su-l:session): session closed for us
er root
Feb 15 06:37:56 localhost su[4300]: pam_unix(su-l:session): session opened for us
er root by (uid=1000)
```