

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

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Sem - 2

Branch: CS

Class: B

Batch: 25

Practical-5

1. Create the following users, groups and group members:

- User 'Virat', 'Rohit' and 'Shubman' and Group 'cricket'.
- The user 'Virat' belongs to the 'IPL' group as a secondary group.
- For User 'Rohit', 'cricket' group should be primary and 'IPL' should be secondary. Virat, 'Rohit', and 'Shubman' should have password "batsman"
- User 'Shubman' who does not have access to interactive shell on the system and who is also a member of 'IPL' group.

Command:

```
sudo useradd -m Virat
sudo useradd -m Rohit
sudo useradd -M -s /sbin/nologin Shubman
echo "Virat:batsman" | sudo chpasswd
echo "Rohit:batsman" | sudo chpasswd
echo "Shubman:batsman" | sudo chpasswd
sudo groupadd cricket
sudo groupadd IPL
sudo usermod -aG IPL Virat
sudo usermod -g cricket Rohit
sudo usermod -aG IPL Rohit
sudo usermod -aG IPL Shubman
```

-s /bin/bash: Specifies the default shell for the user (except for Shubman, who has /sbin/nologin as the shell).

echo "Virat:batsman" | chpasswd: Sets the password for the user

```
sentinel@localhost:~  
File Edit View Search Terminal Help  
[sentinel@localhost ~]$ sudo useradd -m Virat  
[sentinel@localhost ~]$ sudo useradd -m Rohit  
[sentinel@localhost ~]$ sudo useradd -M -s /sbin/nologin Shubman  
[sentinel@localhost ~]$ echo "Virat:batsman" | sudo chpasswd  
[sentinel@localhost ~]$ echo "Rohit:batsman" | sudo chpasswd  
[sentinel@localhost ~]$ echo "Shubman:batsman" | sudo chpasswd  
[sentinel@localhost ~]$ sudo groupadd cricket  
[sentinel@localhost ~]$ sudo groupadd IPL  
[sentinel@localhost ~]$ sudo usermod -aG IPL Virat  
[sentinel@localhost ~]$ sudo usermod -g cricket Rohit  
[sentinel@localhost ~]$ sudo usermod -aG IPL Rohit  
[sentinel@localhost ~]$ sudo usermod -aG IPL Shubman  
[sentinel@localhost ~]$ _
```

Cat /etc/group - for verify

```
sshd:x:74:  
slocate:x:21:  
tcpdump:x:72:  
sentinel:x:1000:  
Virat:x:1001:IPL  
Rohit:x:1002:cricket,IPL  
Shubman:x:1003:IPL  
cricket:x:1004:Rohit  
IPL:x:1005:Virat,Rohit,Shubman  
[sentinel@localhost ~]$ _
```

2. Create the following users, groups and group members:

- group named adminuser with groupid 1020.
- A user named woody, which belongs to the adminuser, this group is the user's primary group
- A user named buzz, belonging to the adminuser, is a supplementary group for the user
- Users woody, buzz, and sid, the password should be set to "password321"
- A user named sid, which has no interactive shell in the system and is not a member of the adminuser group

Command:

```
sudo groupadd -g 1020 adminuser  
sudo useradd -m -g adminuser woody  
sudo useradd -m -G adminuser buzz  
sudo useradd -M -s /sbin/nologin sid  
echo "woody:password321" | sudo chpasswd  
echo "buzz:password321" | sudo chpasswd  
echo "sid:password321" | sudo chpasswd  
sudo usermod -aG adminuser buzz  
sudo usermod -aG adminuser woody
```

```
sentinel@localhost:~  
File Edit View Search Terminal Help  
[sentinel@localhost ~]$ sudo groupadd -g 1020 adminuser  
[sudo] password for sentinel:  
[sentinel@localhost ~]$ sudo useradd -m -g adminuser woody  
[sentinel@localhost ~]$ sudo useradd -m -G adminuser buzz  
[sentinel@localhost ~]$ sudo useradd -M -s /sbin/nologin sid  
[sentinel@localhost ~]$ echo "woody:password321" | sudo chpasswd  
[sentinel@localhost ~]$ echo "buzz:password321" | sudo chpasswd  
[sentinel@localhost ~]$ echo "sid:password321" | sudo chpasswd  
[sentinel@localhost ~]$ sudo usermod -aG adminuser buzz  
[sudo] password for sentinel:  
49Sorry, try again.  
[sudo] password for sentinel:  
Sorry, try again.  
[sudo] password for sentinel:  
[sentinel@localhost ~]$ sudo usermod -aG adminuser buzz  
[sentinel@localhost ~]$ sudo usermod -aG adminuser woody  
[sentinel@localhost ~]$ S_
```

Cat /etc/group – to verify

```
Shubman:x:1003:IPL  
cricket:x:1004:Rohit  
IPL:x:1005:Virat,Rohit,Shubman  
  
adminuser:x:1020:buzz,woody  
buzz:x:1021:  
sid:x:1006:  
[sentinel@localhost ~]$ _
```

Cat /etc/passwd – verify user entry

```
Rohit:x:1002:1004::/home/Rohit:/bin/bash  
Shubman:x:1003:1003::/home/Shubman:/sbin/nologin  
woody:x:1004:1020::/home/woody:/bin/bash  
buzz:x:1005:1021::/home/buzz:/bin/bash  
sid:x:1006:1006::/home/sid:/sbin/nologin  
[sentinel@localhost ~]$ S_
```