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RTOS Lab Experiment No. 4

Title: Creation of a group and user and deletion into terminal.

Command used:

1.getent group

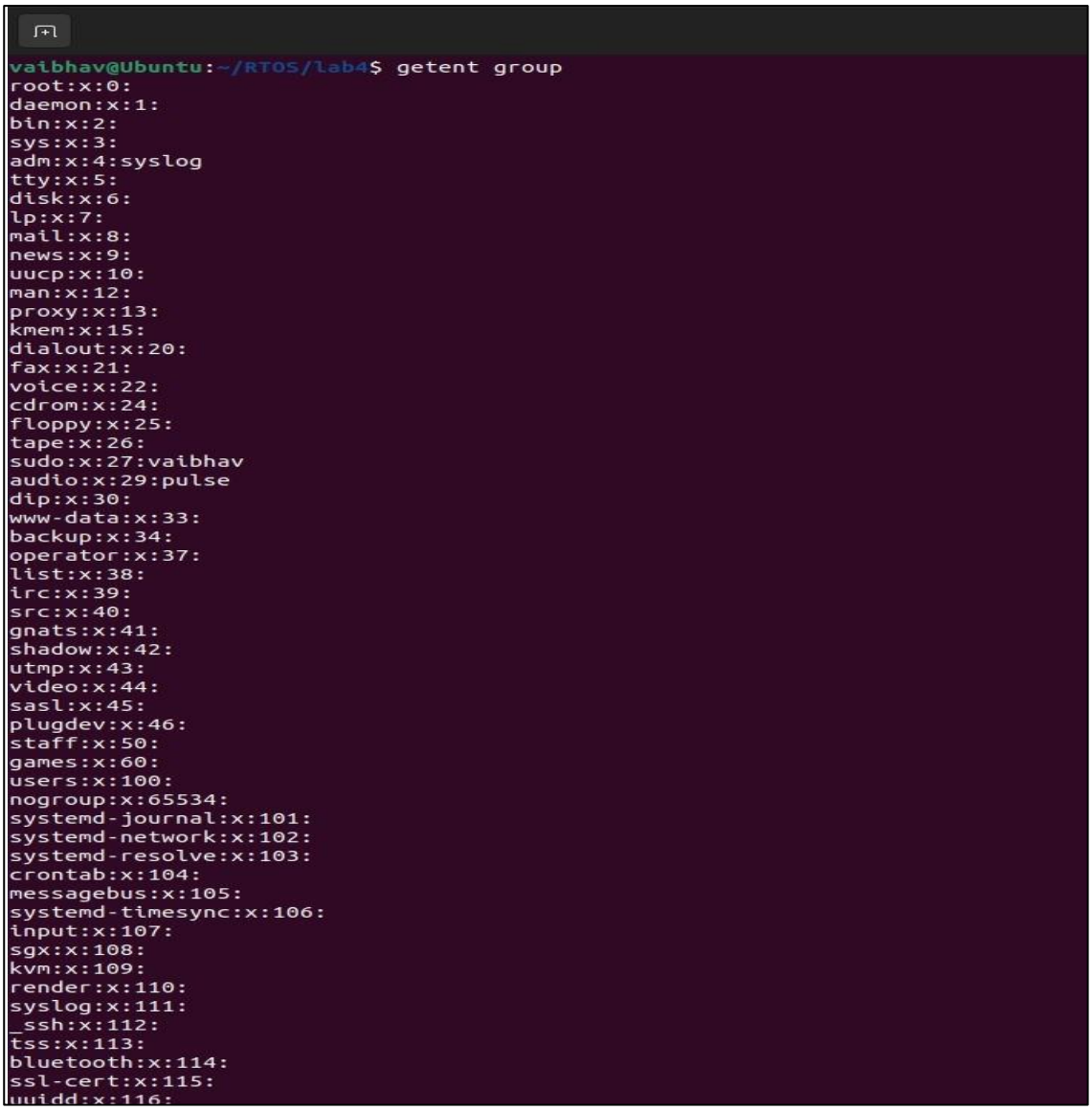
2.sudo adduser username

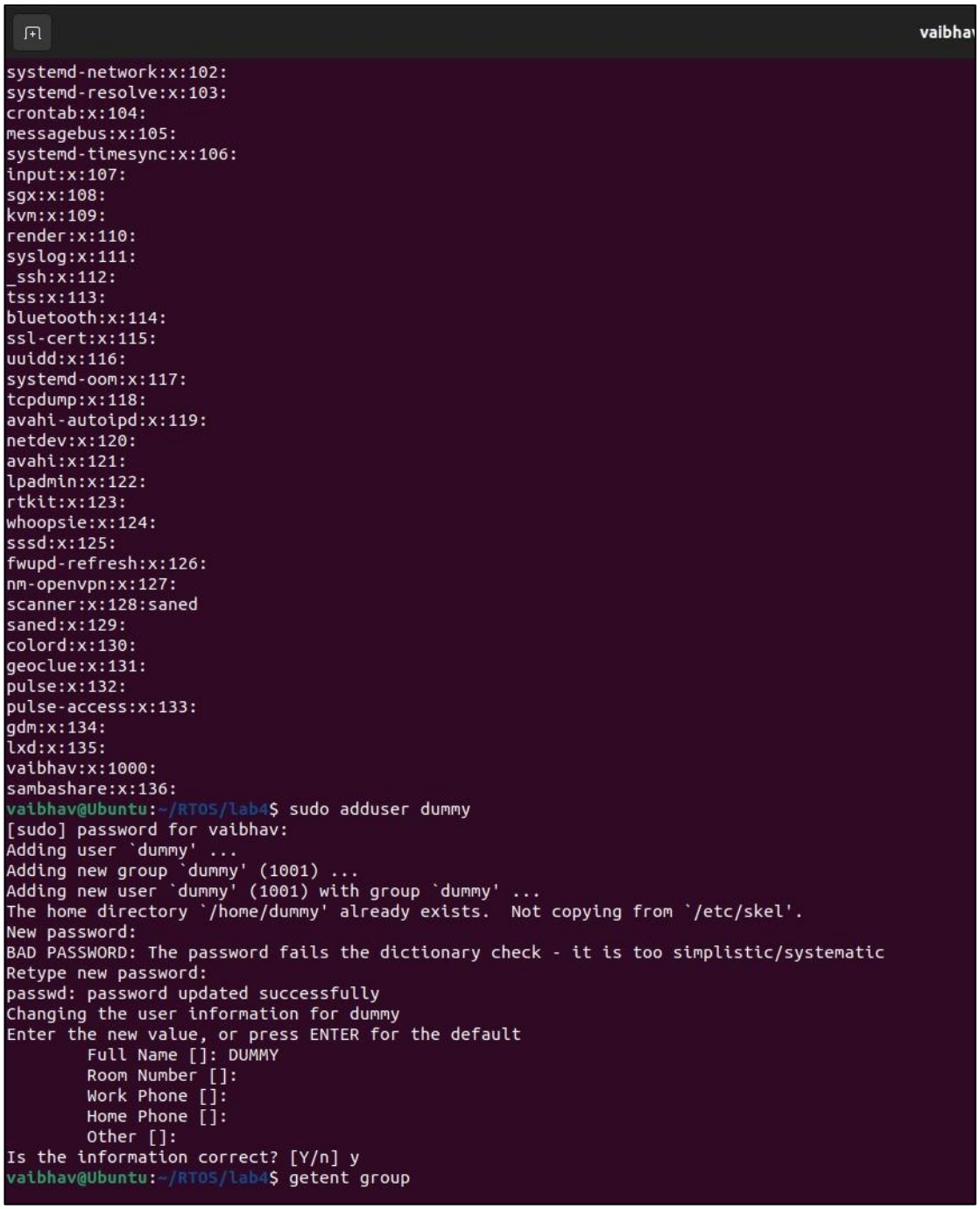
3.sudo addgroup groupname

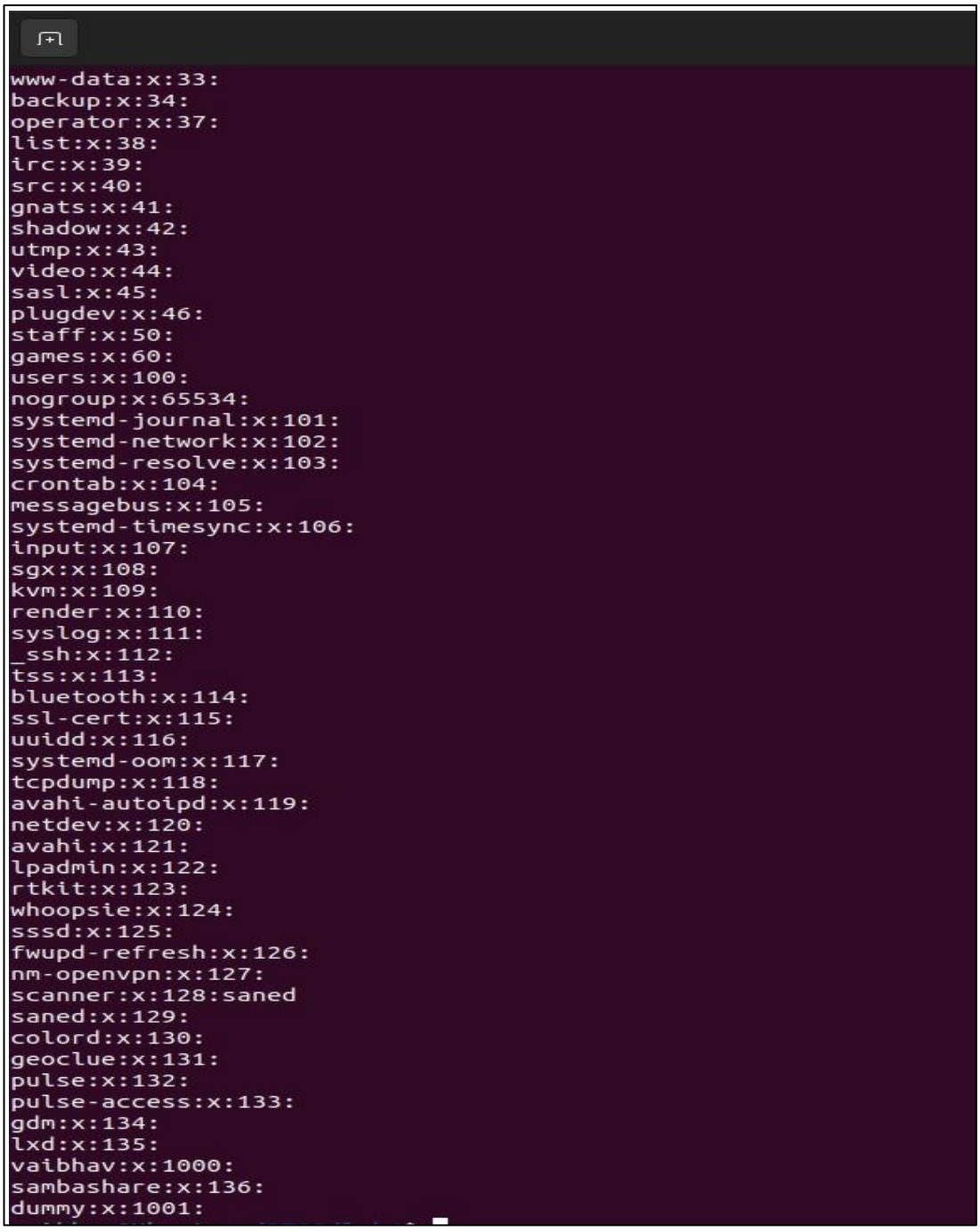
4.sudo delgroup groupname

5.sudo deluser username

Procedure:


vaibhav@Ubuntu:~/RTOS/lab4$ getent group
root:x:0:
daemon:x:1:
bin:x:2:
sys:x:3:
adm:x:4:syslog
tty:x:5:
disk:x:6:
lp:x:7:
mail:x:8:
news:x:9:
uucp:x:10:
man:x:12:
proxy:x:13:
kmem:x:15:
dialout:x:20:
fax:x:21:
voice:x:22:
cdrom:x:24:
floppy:x:25:
tape:x:26:
sudo:x:27:vaibhav
audio:x:29:pulse
dip:x:30:
www-data:x:33:
backup:x:34:
operator:x:37:
list:x:38:
irc:x:39:
src:x:40:
gnats:x:41:
shadow:x:42:
utmp:x:43:
video:x:44:
sasl:x:45:
plugdev:x:46:
staff:x:50:
games:x:60:
users:x:100:
nogroup:x:65534:
systemd-journal:x:101:
systemd-network:x:102:
systemd-resolve:x:103:
crontab:x:104:
messagebus:x:105:
systemd-timesync:x:106:
input:x:107:
sgx:x:108:
kvm:x:109:
render:x:110:
syslog:x:111:
_ssh:x:112:
tss:x:113:
bluetooth:x:114:
ssl-cert:x:115:
uuidd:x:116:


vaibha
systemd-network:x:102:
systemd-resolve:x:103:
crontab:x:104:
messagebus:x:105:
systemd-timesync:x:106:
input:x:107:
sgx:x:108:
kvm:x:109:
render:x:110:
syslog:x:111:
_ssh:x:112:
tss:x:113:
bluetooth:x:114:
ssl-cert:x:115:
uuidd:x:116:
systemd-oom:x:117:
tcpdump:x:118:
avahi-autoipd:x:119:
netdev:x:120:
avahi:x:121:
lpadmin:x:122:
rtkit:x:123:
whoopsie:x:124:
sssd:x:125:
fwupd-refresh:x:126:
nm-openvpn:x:127:
scanner:x:128:saned
saned:x:129:
colord:x:130:
geoclue:x:131:
pulse:x:132:
pulse-access:x:133:
gdm:x:134:
lxd:x:135:
vaibhav:x:1000:
sambashare:x:136:
vaibhav@Ubuntu:~/RTOS/lab4$ sudo adduser dummy
[sudo] password for vaibhav:
Adding user `dummy' ...
Adding new group `dummy' (1001) ...
Adding new user `dummy' (1001) with group `dummy' ...
The home directory `/home/dummy' already exists.  Not copying from `/etc/skel'.
New password:
BAD PASSWORD: The password fails the dictionary check - it is too simplistic/systematic
Retype new password:
passwd: password updated successfully
Changing the user information for dummy
Enter the new value, or press ENTER for the default
Full Name []: DUMMY
Room Number []:
Work Phone []:
Home Phone []:
Other []:
Is the information correct? [Y/n] y
vaibhav@Ubuntu:~/RTOS/lab4$ getent group


www-data:x:33:
backup:x:34:
operator:x:37:
list:x:38:
irc:x:39:
src:x:40:
gnats:x:41:
shadow:x:42:
utmp:x:43:
video:x:44:
sasl:x:45:
plugdev:x:46:
staff:x:50:
games:x:60:
users:x:100:
nogroup:x:65534:
systemd-journal:x:101:
systemd-network:x:102:
systemd-resolve:x:103:
crontab:x:104:
messagebus:x:105:
systemd-timesync:x:106:
input:x:107:
sgx:x:108:
kvm:x:109:
render:x:110:
syslog:x:111:
_ssh:x:112:
tss:x:113:
bluetooth:x:114:
ssl-cert:x:115:
uuidd:x:116:
systemd-oom:x:117:
tcpdump:x:118:
avahi-autoipd:x:119:
netdev:x:120:
avahi:x:121:
lpadmin:x:122:
rtkit:x:123:
whoopsie:x:124:
sssd:x:125:
fwupd-refresh:x:126:
nm-openvpn:x:127:
scanner:x:128:saned
saned:x:129:
colord:x:130:
geoclue:x:131:
pulse:x:132:
pulse-access:x:133:
gdm:x:134:
lxd:x:135:
vaibhav:x:1000:
sambashare:x:136:
dummy:x:1001:

```
pulse:x:132:
pulse-access:x:133:
gdm:x:134:
lxd:x:135:
vaibhav:x:1000:
sambashare:x:136:
dummy:x:1001:
vaibhav@Ubuntu:~/RTOS/lab4$ sudo addgroup abcd
Adding group `abcd' (GID 1002) ...
Done.
vaibhav@Ubuntu:~/RTOS/lab4$ sudo delgroup abcd
Removing group `abcd' ...
Done.
vaibhav@Ubuntu:~/RTOS/lab4$ sudo deluser dummy
Removing user `dummy' ...
Warning: group `dummy' has no more members.
Done.
vaibhav@Ubuntu:~/RTOS/lab4$
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kvm:x:109:
render:x:110:
syslog:x:111:
_ssh:x:112:
tss:x:113:
bluetooth:x:114:
ssl-cert:x:115:
uuidd:x:116:
systemd-oom:x:117:
tcpdump:x:118:
avahi-autoipd:x:119:
netdev:x:120:
avahi:x:121:
lpadmin:x:122:
rtkit:x:123:
whoopsie:x:124:
sssd:x:125:
fwupd-refresh:x:126:
nm-openvpn:x:127:
scanner:x:128:saned
saned:x:129:
colord:x:130:
geoclue:x:131:
pulse:x:132:
pulse-access:x:133:
gdm:x:134:
lxd:x:135:
vaibhav:x:1000:
sambashare:x:136:
vaibhav@Ubuntu:~/RTOS/lab4$
```

Conclusion:

In conclusion, creating and managing users and groups in Linux is fundamental for maintaining a secure and organized system. By properly setting up users and assigning them to groups, administrators can control access to files, directories, and system resources, ensuring the right level of permissions for each user. Understanding user and group management enhances system security, fosters collaboration, and allows for better organization of users in multi-user environments. It's an essential skill for efficient system administration.

Answer the following.

1.Significance of creating user and group.

→

Creating a user and group in Linux is significant for several reasons:

1.**Access Control and Security**: Users and groups help in managing access permissions to files, directories, and system resources. By assigning specific users to groups, administrators can control who has read, write, or execute permissions.

2.**Multi-User Environment**: Linux is designed as a multi-user system, and each user should have a unique account. Groups allow users to share permissions and collaborate on files or projects efficiently.

3. **Privilege Management**: Users can be given specific roles or levels of access. For example, an admin group might have elevated privileges (like sudo access), while regular users have restricted access.

4. **System Administration**: By organizing users into groups, system administrators can apply settings, run scripts, and assign permissions collectively to a group rather than individually, improving efficiency.