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2KE20CS032

Assignment 1

Understood. To follow the provided instructions and create the files/directory using the same name and case as provided in the task steps, please provide me with the specific names and case instructions for the files/directory you want to create.

Assignment on User Management and Permissions

Task 1: Login as root create User and Provide sudo privilege

1)To create a new user for this assignment and set a password for the new user

```
root@localhost ~]# useradd lusi
seradd: user 'lusi' already exists
```

2)now provide sudo privileges to the user you created

Just we need ***visudo*** command to be run ***and change the configure file <lusi > ALL=(ALL) ALL***

```
##
## The COMMANDS section may have other options added to it.
##
## Allow root to run any commands anywhere
root    ALL=(ALL)       ALL
lusi    ALL=(ALL)       ALL
## Allows members of the 'sys' group to run networking, software,
## service management apps and more.
# %sys ALL = NETWORKING, SOFTWARE, SERVICES, STORAGE, DELEGATING, PROCESSES, LOCATE, DRIVERS
```

```
[root@localhost ~]# sudo -l
Matching Defaults entries for root on localhost:
    !visiblepw, always_set_home, match_group_by_gid, always_query_group_plugin, env_reset, env_keep="COLORS DISPLAY
    HOSTNAME HISTSIZE KDEDIR LS_COLORS", env_keep+="MAIL PS1 PS2 QTDIR USERNAME LANG LC_ADDRESS LC_CTYPE",
    env_keep+="LC_COLLATE LC_IDENTIFICATION LC_MEASUREMENT LC_MESSAGES", env_keep+="LC_MONETARY LC_NAME LC_NUMERIC
    LC_PAPER LC_TELEPHONE", env_keep+="LC_TIME LC_ALL LANGUAGE LINGUAS _XKB_CHARSET XAUTHORITY",
    secure_path=/sbin\:/bin\:/usr/sbin\:/usr/bin

User root may run the following commands on localhost:
    (ALL) ALL
[root@localhost ~]#
```

3)To log out of the root user and log in as the new user.

```
lusi@localhost:~
Microsoft Windows [Version 10.0.19045.2965]
(c) Microsoft Corporation. All rights reserved.

C:\Users\resq>ssh lusi@192.168.56.101
lusi@192.168.56.101's password:
[lusi@localhost ~]$
```

Task 2 :Managing users

1)Create users "webuser", "appuser", and "dbuser":

```
[lusi@localhost ~]$ sudo useradd webuser
[lusi@localhost ~]$ sudo useradd appuser
[lusi@localhost ~]$ sudo useradd dbuser
```

```
vagrant:x:1000:1000:vagrant:/home/vagrant:/bin/bash
karti:x:1001:1001::/home/karti:/bin/bash
lusi:x:1002:1002::/home/lusi:/bin/bash
webuser:x:1003:1003::/home/webuser:/bin/bash
appuser:x:1004:1004::/home/appuser:/bin/bash
dbuser:x:1005:1005::/home/dbuser:/bin/bash
[lusi@localhost ~]$
```

2)Create groups "web", "app", and "db":

create

```
[lusi@localhost ~]$ sudo groupadd web
[lusi@localhost ~]$ sudo groupadd app
[lusi@localhost ~]$ sudo groupadd db
```

check

```
[lusi@localhost ~]$ cat /etc/group
```

```
web:x:1006:
app:x:1007:
db:x:1008:
[lusi@localhost ~]$
```

3)Add "webuser" to the "web" group, "appuser" to the "app"

```
[lusi@localhost ~]$ id appuser
uid=1004(appuser) gid=1004(appuser) groups=1004(appuser),1007(app)
[lusi@localhost ~]$ id webuser
uid=1003(webuser) gid=1003(webuser) groups=1003(webuser),1006(web)
[lusi@localhost ~]$ id dbuser
uid=1005(dbuser) gid=1005(dbuser) groups=1005(dbuser),1008(db)
[lusi@localhost ~]$
```

```
[lusi@localhost ~]$ sudo usermod -a -G app appuser
[sudo] password for lusi:
[lusi@localhost ~]$ sudo usermod -a -G web webuser
[lusi@localhost ~]$ sudo usermod -a -G db dbuser
[lusi@localhost ~]$
```

4) Set“sh”as the default shell for“webuser”,“appuser”,“dbuser”

```
[lusi@localhost ~]$ sudo chsh -s /bin/sh appuser
Changing shell for appuser.
Shell changed.
[lusi@localhost ~]$ sudo chsh -s /bin/sh webuser
Changing shell for webuser.
Shell changed.
[lusi@localhost ~]$ sudo chsh -s /bin/sh dbuser
Changing shell for dbuser.
Shell changed.
```

5.Set /tmp as default home directory for all the users

```
[lusi@localhost ~]$ sudo usermod -d /tmp appuser
[lusi@localhost ~]$ sudo usermod -d /tmp webuser
[lusi@localhost ~]$ sudo usermod -d /tmp dbuser
[lusi@localhost ~]$
```

```
[lusi@localhost ~]$ echo ~appuser
/tmp
[lusi@localhost ~]$ echo ~dbuser
/tmp
[lusi@localhost ~]$ echo ~webuser
/tmp
[lusi@localhost ~]$
```

Task 3 : Providing permissions

1)Create the directory structure for the app as /web/bin:

```
[lusi@localhost ~]$ mkdir -p /web/bin
[lusi@localhost home]$ ls -a
.  ..  app
[lusi@localhost home]$ cd app
[lusi@localhost app]$ la -a
-bash: la: command not found
[lusi@localhost app]$ cd
[lusi@localhost ~]$ cd
[lusi@localhost ~]$ cd
[lusi@localhost ~]$ ls -a
.  ..  app  .bash_history  .bash_logout  .bash_profile  .bashrc  home
[lusi@localhost ~]$ cd home
[lusi@localhost home]$ ls -a
.  ..  app
[lusi@localhost home]$ cd app
[lusi@localhost app]$ ls -a
.  ..  web
[lusi@localhost app]$ cd web
[lusi@localhost web]$ ls -a
.  ..  bin
[lusi@localhost web]$
```

2)Change the ownership of the web directory to webuser and change the group to webgroup:

```
[lusi@localhost ~]$ sudo chown webuser:web /web
[lusi@localhost ~]$ sudo ls -l /web
total 0
drwxr-xr-x. 2 root root 6 May 20 02:13 bin
[lusi@localhost ~]$
```

3)Provide "rwx" permissions for webuser, "rw" permissions for webgroup, and "r" permissions for others to the /web directory

```
ast login: Sat May 20 09:44:40 2023 from 192.168.56.1
lusi@localhost ~]$ sudo chmod u=rwx,g=rx,o= /web
sudo] password for lusi:
lusi@localhost ~]$ sudo ls -l /web
otal 0
rwxr-xr-x. 2 root root 6 May 20 02:13 bin
lusi@localhost ~]$
```