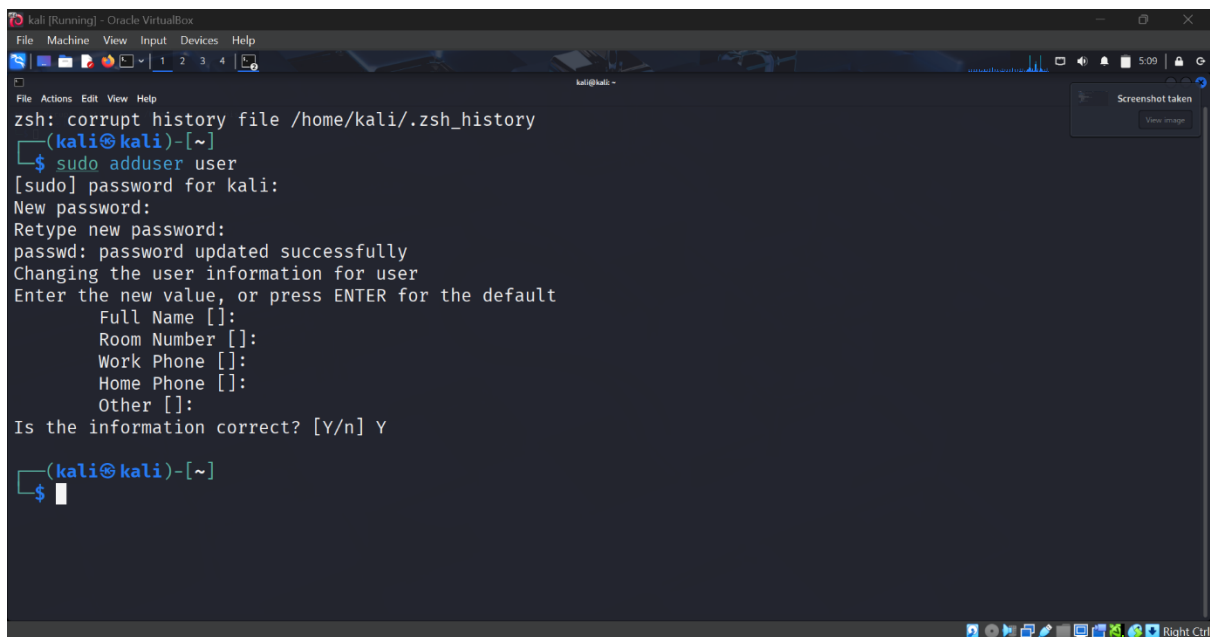


TASK 1

- Create a new user called 'studentuser'.
- Create the following directory structure: /home/studentuser/projectX/logs
/home/studentuser/projectX/scripts
- Create a file 'welcome.txt' in 'projectX' with the content 'Welcome to Linux'. • Set permissions so only 'studentuser' can read/write the file.
- Create a script 'backup.sh' in 'scripts' that copies 'welcome.txt' to 'logs' with a timestamp.

Step 1 :

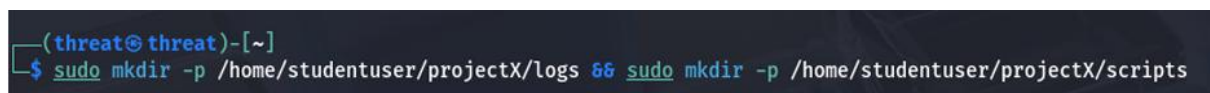
Create a new user



```
kali [Running] - Oracle VirtualBox
File Machine View Input Devices Help
kali@kali ~
zsh: corrupt history file /home/kali/.zsh_history
(kali@kali)~$ sudo adduser user
[sudo] password for kali:
New password:
Retype new password:
passwd: password updated successfully
Changing the user information for user
Enter the new value, or press ENTER for the default
  Full Name []:
  Room Number []:
  Work Phone []:
  Home Phone []:
  Other []:
Is the information correct? [Y/n] Y
(kali@kali)~$
```

Step 2 :

Create Project folders



```
(threat@threat)~$ sudo mkdir -p /home/studentuser/projectX/logs && sudo mkdir -p /home/studentuser/projectX/scripts
```

Step 3 :

****Permission Management****: Assigned ownership of the directories to the new user using `chown`

```
(threat@threat)-[~]  
$ sudo chown -R studentuser:studentuser /home/studentuser/projectX
```

Step 4 :

Create a welcome user

```
(threat@threat)-[~]  
$ sudo -u studentuser bash -c "echo 'Welcome to Linux' > /home/studentuser/projectX/welcome.txt"
```

Step 5 :

Secure file permissions

```
(threat@threat)-[~]  
$ sudo chmod 600 /home/studentuser/projectX/welcome.txt
```

Step 6 :

Create a Backup Script

```
(threat@threat)-[~]  
$ sudo chmod 600 /home/studentuser/projectX/welcome.txt
```

And , paste this code in nano

```
#!/bin/bash # backup.sh  Simple Backup Script  
SOURCE_FILE="/home/studentuser/projectX/welcome.txt"  
BACKUP_DIR="/home/studentuser/projectX/logs" TIMESTAMP=$(date +%Y%m%d_%H%M%S)  
BACKUP_FILE="$BACKUP_DIR/welcome_${TIMESTAMP}.txt" cp "$SOURCE_FILE" "$BACKUP_FILE" echo  
"Backup created: $BACKUP_FILE"
```

Step 7 :

Make it executable

```
(threat@threat)-[~]  
$ sudo chmod +x /home/studentuser/projectX/scripts/backup.sh
```

Step 8 :

Edit script if needed

```
(threat@threat)-[~]  
$ sudo -u studentuser nano /home/studentuser/projectX/scripts/backup.sh
```

Step 9 :

Run the Backup Script

```
(threat@threat)-[~]  
$ sudo -u studentuser /home/studentuser/projectX/scripts/backup.sh
```

The output is

Backup created: /home/studentuser/projectX/logs/welcome_20250727_123211. Txt

Step 10 :

Verify the logs

```
(threat@threat)-[~]  
$ sudo ls /home/studentuser/projectX/logs/  
welcome_20250727_123211.txt
```