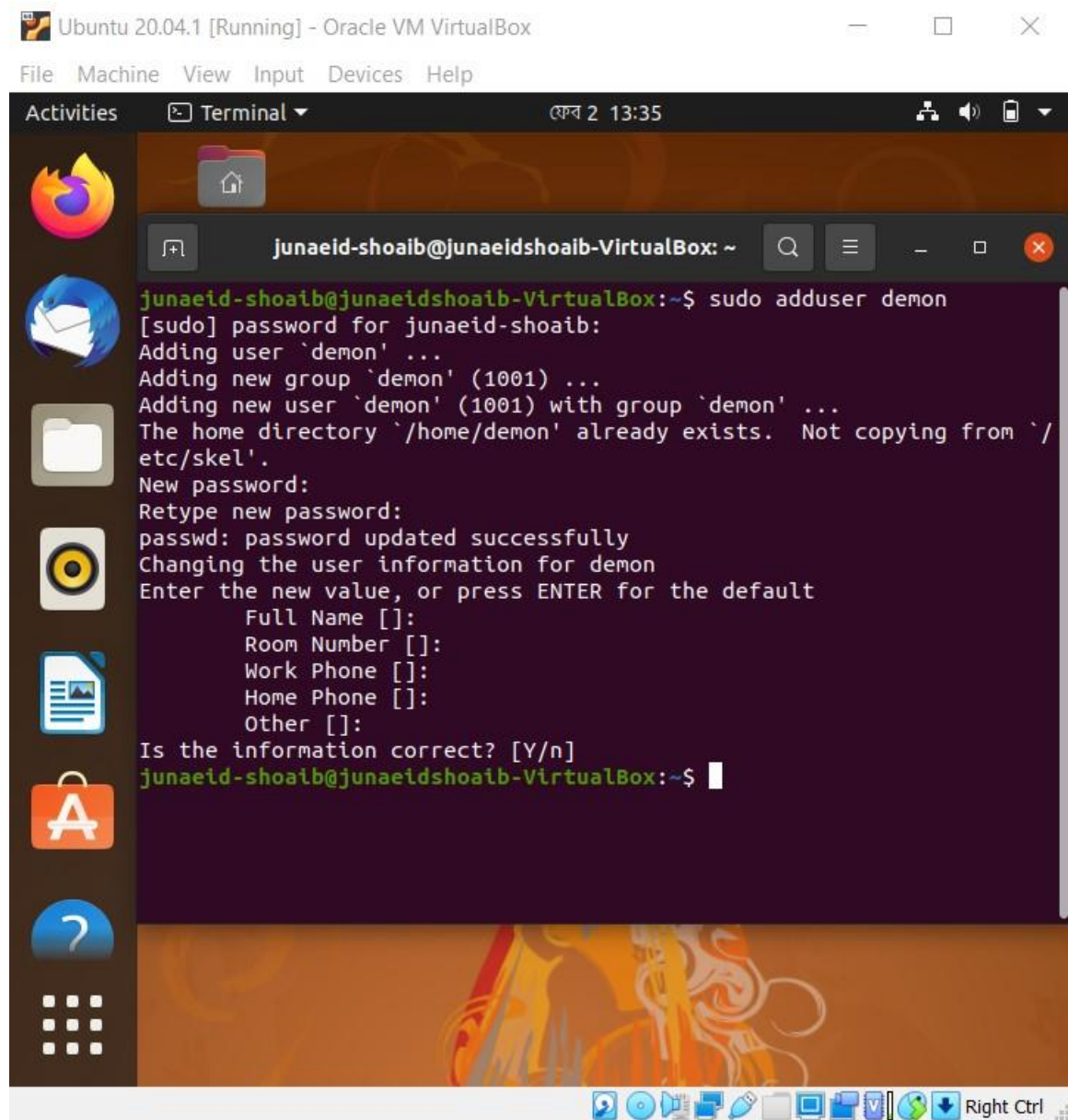


1. What is shell?
Ans: Shell is an environment in which we can run our commands, programs, and shell scripts. There are different flavors of a shell, just as there are different flavors of operating systems. Each flavor of shell has its own set of recognized commands and functions. When a program finishes executing, it displays that program's output.
2. What is terminal?
Ans: **Terminal** is a program that opens a graphical window and lets you interact with the **shell**.
3. **What is user friendly in between terminal and GUI & why?**
Ans: **GUI** objects include icons, cursors, and buttons. These graphical elements are sometimes enhanced with sounds, or visual effects like transparency and drop shadows. A **GUI** is considered to be more **user-friendly** than a text-based command-line **interface**, such as MS-DOS, or the shell of Unix-like operating systems.
4. What defines a user account?
Ans: A **user account** is an identity created for a person in a computer or computing system.
5. What is root user?
Ans: The **root** is the **user** name or account that by default has **access** to all commands and files on a **Linux** or other Unix-like operating system. It is also referred to as the **root** account, **root user**, and the **superuser**.
6. What is general purpose user?
Ans: A **general-purpose** user is one that, given the appropriate application and required time, should be able to perform most common computing tasks. Personal computers, including desktops, notebooks, smartphones and tablets, are all examples of **general-purpose** users.
7. What are the difference between root user and general purpose user?
Ans: The **root user** is basically equivalent to the administrator **user** on Windows – the **root user** has maximum permissions and can do anything to the system. Normal **users** on Linux run with reduced permissions – for example, they can't install software or write to system directories.
8. What is the meaning of sudo?
Ans: **sudo** is an abbreviation of "super user **do**" and is a Linux command that allows programs to be executed as a super user (aka root user) or another user.
9. What is the meaning of su?
Ans: The Unix command **su**, which stands for substitute user, is used by a computer user to execute commands with the privileges of another user account.
10. Why we use sudo?
Ans: Whenever a user tries to install, remove or change any piece of software, he has to have the root privileges to perform such tasks. The **sudo** command is **used** to give such permissions to any particular command that a user wants to execute once the user enters a user password to give system based permissions.
11. **Why we use su?**
Ans: **su** is one of the core utilities in **Linux**. **It** allows users to execute commands as another user. The most common **use** of the **su** is to get **superuser** privileges. **It** is often mistaken as an abbreviation for "super user", but **it** is an abbreviation for "substitute user".
12. How to create a user account?

Ans:



Ubuntu 20.04.1 [Running] - Oracle VM VirtualBox

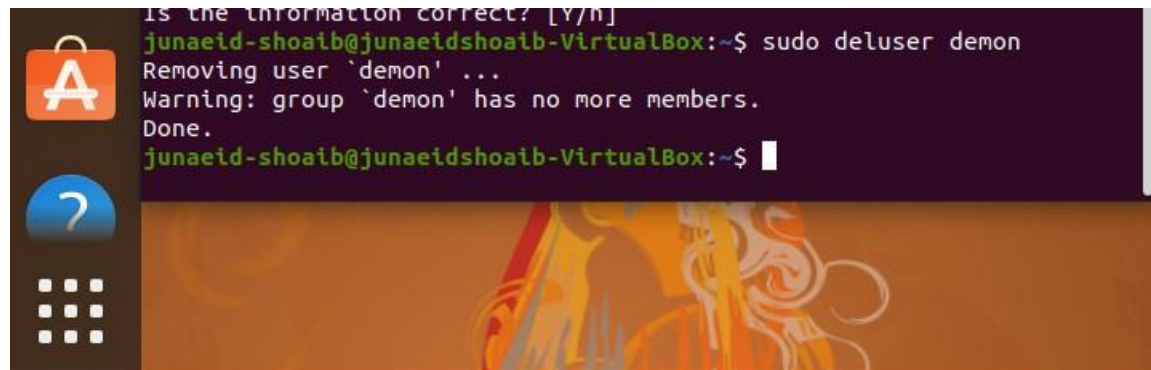
File Machine View Input Devices Help

Activities Terminal ১৫৫২ ১৩:৩৫

```
junaeid-shoaib@junaeidshoaib-VirtualBox: ~  
junaeid-shoaib@junaeidshoaib-VirtualBox:~$ sudo adduser demon  
[sudo] password for junaeid-shoaib:  
Adding user `demon' ...  
Adding new group `demon' (1001) ...  
Adding new user `demon' (1001) with group `demon' ...  
The home directory `/home/demon' already exists. Not copying from `/etc/skel'.  
New password:  
Retype new password:  
passwd: password updated successfully  
Changing the user information for demon  
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]  
junaeid-shoaib@junaeidshoaib-VirtualBox:~$
```

13. How to delete a user?

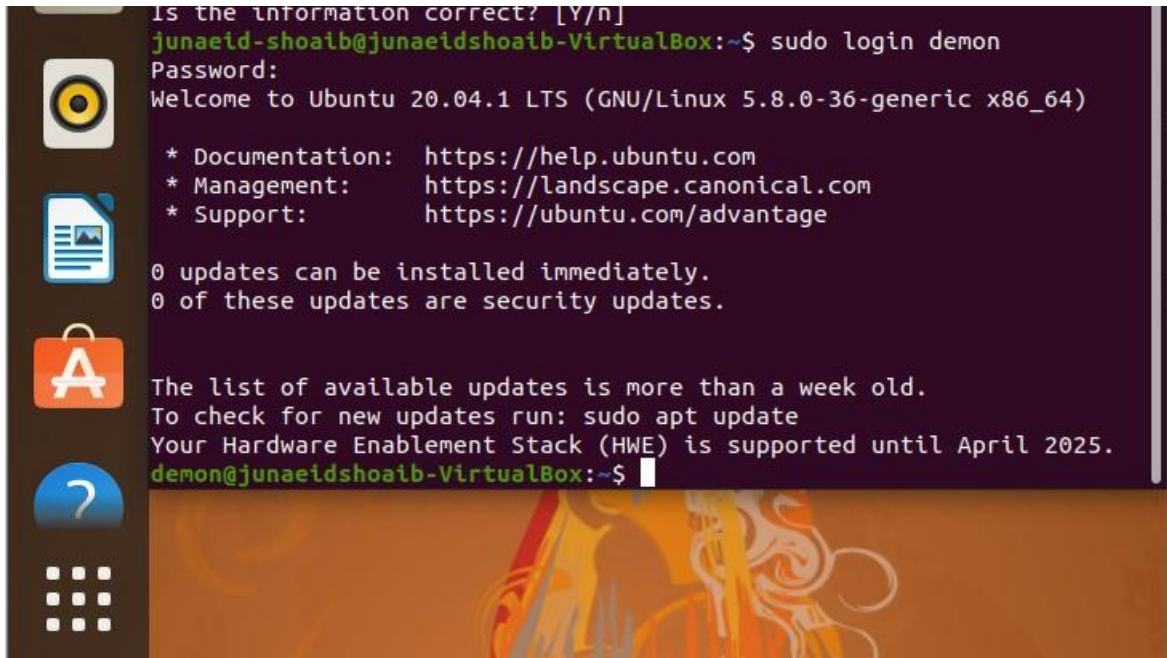
Ans:



```
Is the information correct? [Y/n]  
junaeid-shoaib@junaeidshoaib-VirtualBox:~$ sudo deluser demon  
Removing user `demon' ...  
Warning: group `demon' has no more members.  
Done.  
junaeid-shoaib@junaeidshoaib-VirtualBox:~$
```

14. How to login into a user account?

Ans:

A terminal window showing the process of logging in as the 'demon' user. The prompt is 'junaeid-shoaib@junaeidshoaib-VirtualBox:~\$'. The user enters 'sudo login demon'. The prompt changes to 'Password:'. The user enters their password. The terminal displays 'Welcome to Ubuntu 20.04.1 LTS (GNU/Linux 5.8.0-36-generic x86_64)'. It then shows system information: '* Documentation: https://help.ubuntu.com', '* Management: https://landscape.canonical.com', and '* Support: https://ubuntu.com/advantage'. Below this, it says '0 updates can be installed immediately. 0 of these updates are security updates.' and 'The list of available updates is more than a week old. To check for new updates run: sudo apt update'. It also mentions 'Your Hardware Enablement Stack (HWE) is supported until April 2025.' Finally, the prompt changes to 'demon@junaeidshoaib-VirtualBox:~\$'.

```
Is the information correct? [Y/n]
junaeid-shoaib@junaeidshoaib-VirtualBox:~$ sudo login demon
Password:
Welcome to Ubuntu 20.04.1 LTS (GNU/Linux 5.8.0-36-generic x86_64)

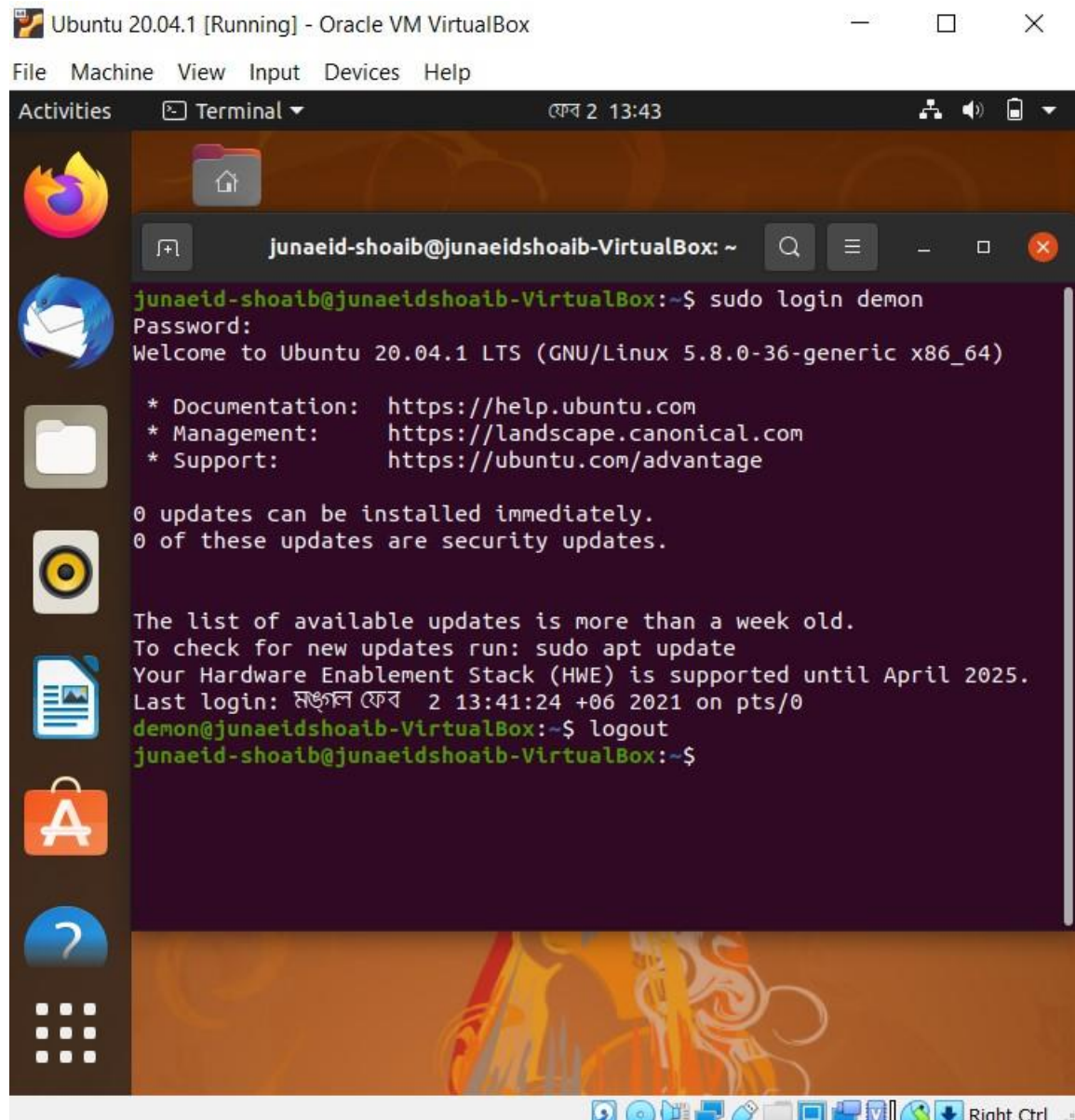
 * Documentation:  https://help.ubuntu.com
 * Management:    https://landscape.canonical.com
 * Support:       https://ubuntu.com/advantage

0 updates can be installed immediately.
0 of these updates are security updates.

The list of available updates is more than a week old.
To check for new updates run: sudo apt update
Your Hardware Enablement Stack (HWE) is supported until April 2025.
demon@junaeidshoaib-VirtualBox:~$
```

15. How to logout from a user account?

Ans:



The screenshot shows a terminal window titled "junaeid-shoaib@junaeidshoaib-VirtualBox: ~". The user has executed the command `sudo login demon`. The terminal output shows the password prompt, a welcome message for Ubuntu 20.04.1 LTS, and system information including documentation, management, and support links. It also indicates that no updates can be installed immediately. The user then enters `logout` and the terminal returns to the prompt `junaeid-shoaib@junaeidshoaib-VirtualBox:~$`.

```
junaeid-shoaib@junaeidshoaib-VirtualBox:~$ sudo login demon
Password:
Welcome to Ubuntu 20.04.1 LTS (GNU/Linux 5.8.0-36-generic x86_64)

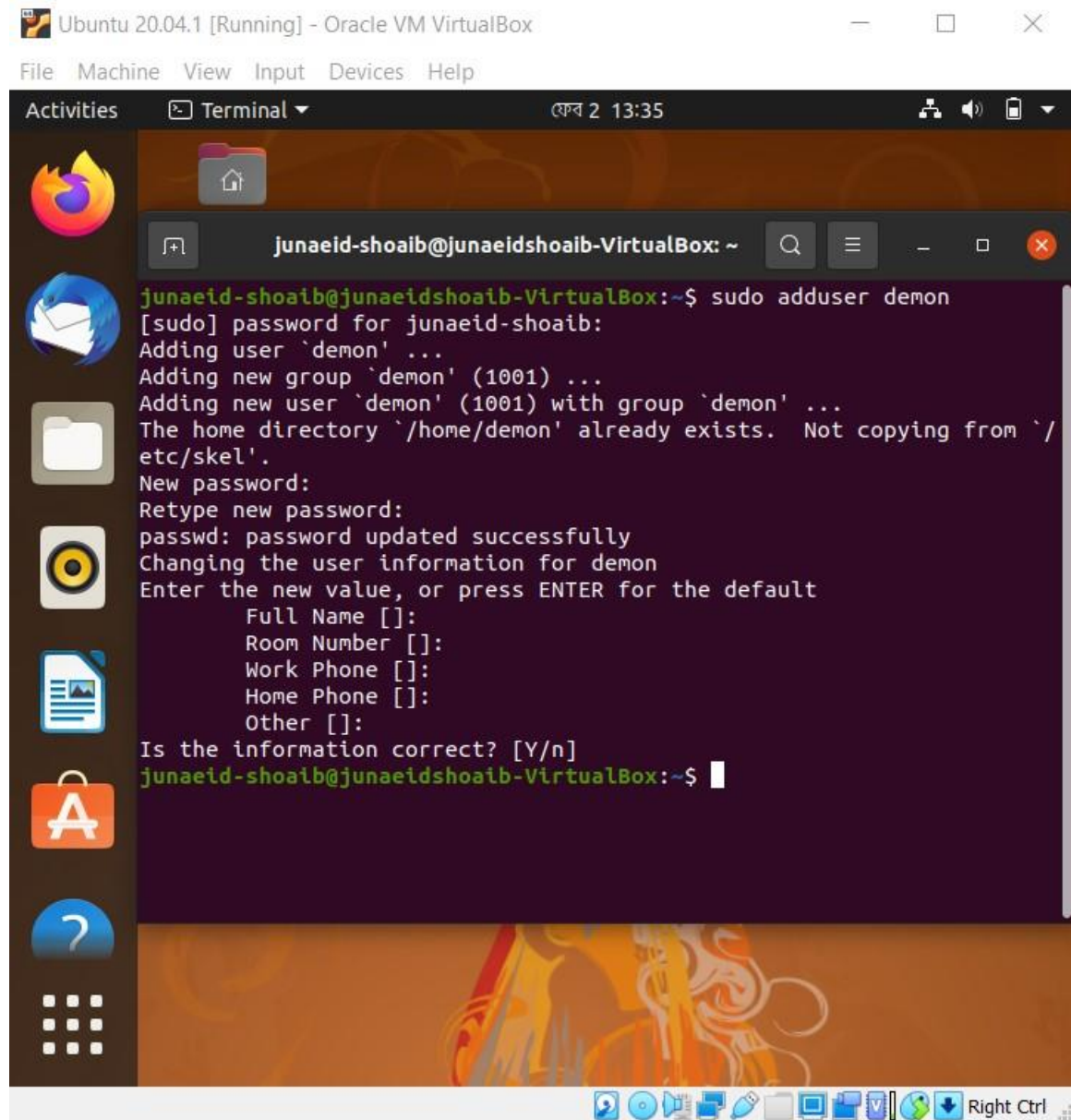
 * Documentation:  https://help.ubuntu.com
 * Management:    https://landscape.canonical.com
 * Support:       https://ubuntu.com/advantage

0 updates can be installed immediately.
0 of these updates are security updates.

The list of available updates is more than a week old.
To check for new updates run: sudo apt update
Your Hardware Enablement Stack (HWE) is supported until April 2025.
Last login: মঙ্গল ফেব  2 13:41:24 +06 2021 on pts/0
demon@junaeidshoaib-VirtualBox:~$ logout
junaeid-shoaib@junaeidshoaib-VirtualBox:~$
```

16. How many times it requires password for creating a user account?

Ans: Total 3 .One old/current user password and two new .

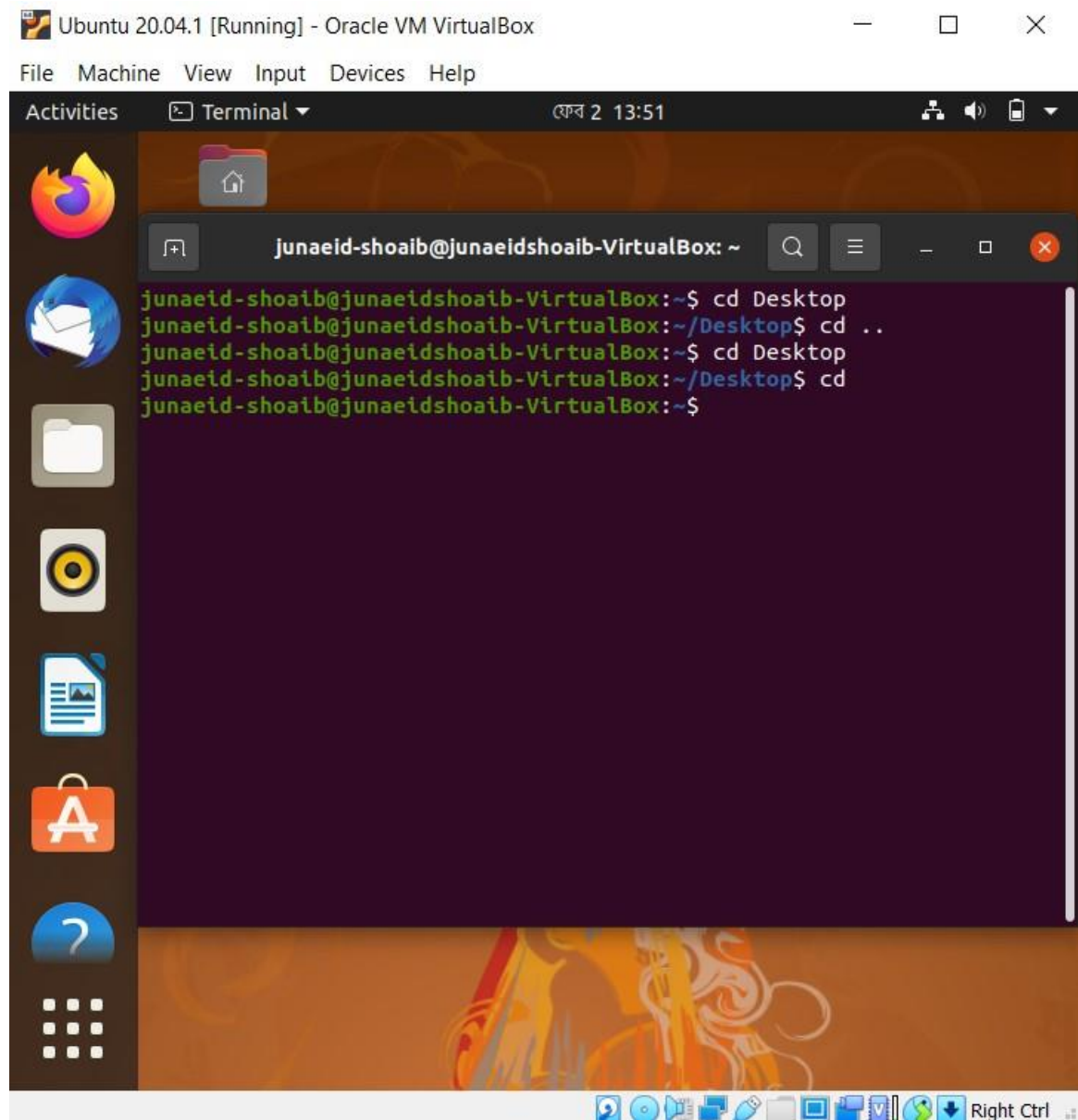


The screenshot shows a terminal window titled 'Ubuntu 20.04.1 [Running] - Oracle VM VirtualBox'. The terminal prompt is 'junaeid-shoaib@junaeidshoaib-VirtualBox: ~'. The user has entered 'sudo adduser demon'. The terminal output shows the following steps: asking for the password, adding the user, adding a new group 'demon' (1001), adding a new user 'demon' (1001) with the group 'demon', and noting that the home directory '/home/demon' already exists. It then prompts for a new password, which is entered and confirmed. Finally, it prompts for user information (Full Name, Room Number, Work Phone, Home Phone, Other) and asks if the information is correct. The terminal prompt returns to 'junaeid-shoaib@junaeidshoaib-VirtualBox: ~\$'.

```
junaeid-shoaib@junaeidshoaib-VirtualBox:~$ sudo adduser demon
[sudo] password for junaeid-shoaib:
Adding user `demon' ...
Adding new group `demon' (1001) ...
Adding new user `demon' (1001) with group `demon' ...
The home directory `/home/demon' already exists. Not copying from `/etc/skel'.
New password:
Retype new password:
passwd: password updated successfully
Changing the user information for demon
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]
junaeid-shoaib@junaeidshoaib-VirtualBox:~$
```

17. How to exit from root?

Ans:



The screenshot shows a terminal window titled "Ubuntu 20.04.1 [Running] - Oracle VM VirtualBox". The terminal output is as follows:

```
junaeid-shoaib@junaeidshoaib-VirtualBox:~$ cd Desktop
junaeid-shoaib@junaeidshoaib-VirtualBox:~/Desktop$ cd ..
junaeid-shoaib@junaeidshoaib-VirtualBox:~$ cd Desktop
junaeid-shoaib@junaeidshoaib-VirtualBox:~/Desktop$ cd
junaeid-shoaib@junaeidshoaib-VirtualBox:~$
```

18. What is the meaning of `sudo adduser {username}`?

Ans: Sudo is a program for Unix-like computer operating systems that allows users to run programs with the security privileges of another user, by default the superuser. **Adduser** command in Linux is used to add a new user to your current Linux machine. This command allows you to modify the configurations of the user which is to be created.

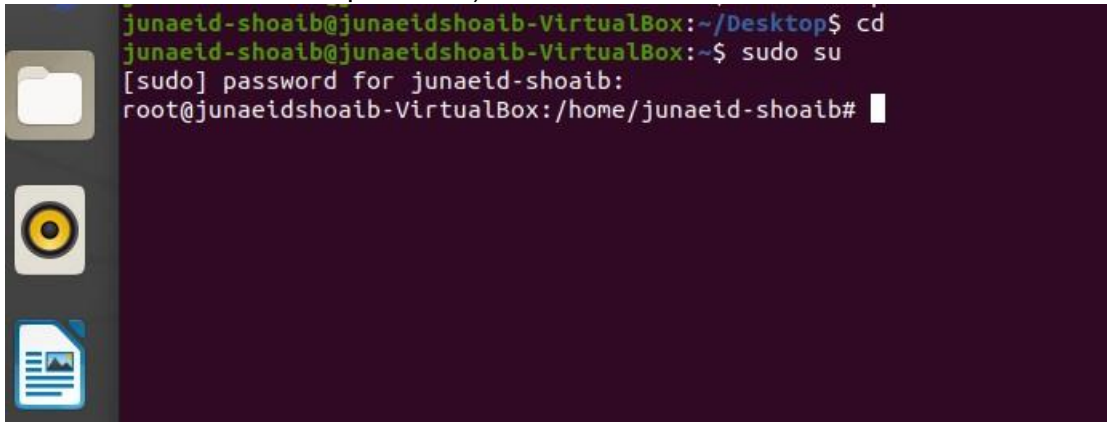
19. What is the meaning of `deluser {username}`?

Ans: deluser removes the user without removing the home directory, the mail spool or any other files on the system owned by the user.

20. What is the meaning of `sudo su`?

Ans: You will get a root shell.

Therefore `sudo su -` will put you into a root environment but it will ask you for your user password instead of the root password (once `sudo` has given you root privileges, `su -` can be executed with no password).

A terminal window with a dark purple background and a light grey sidebar on the left containing icons for a folder, a CD, and a document. The terminal text is as follows:

```
junaeid-shoaib@junaeidshoaib-VirtualBox:~/Desktop$ cd
junaeid-shoaib@junaeidshoaib-VirtualBox:~$ sudo su
[sudo] password for junaeid-shoaib:
root@junaeidshoaib-VirtualBox:/home/junaeid-shoaib#
```