

LECTURE 3

USER INTERFACE

- Command line skills
- Linux files and directories



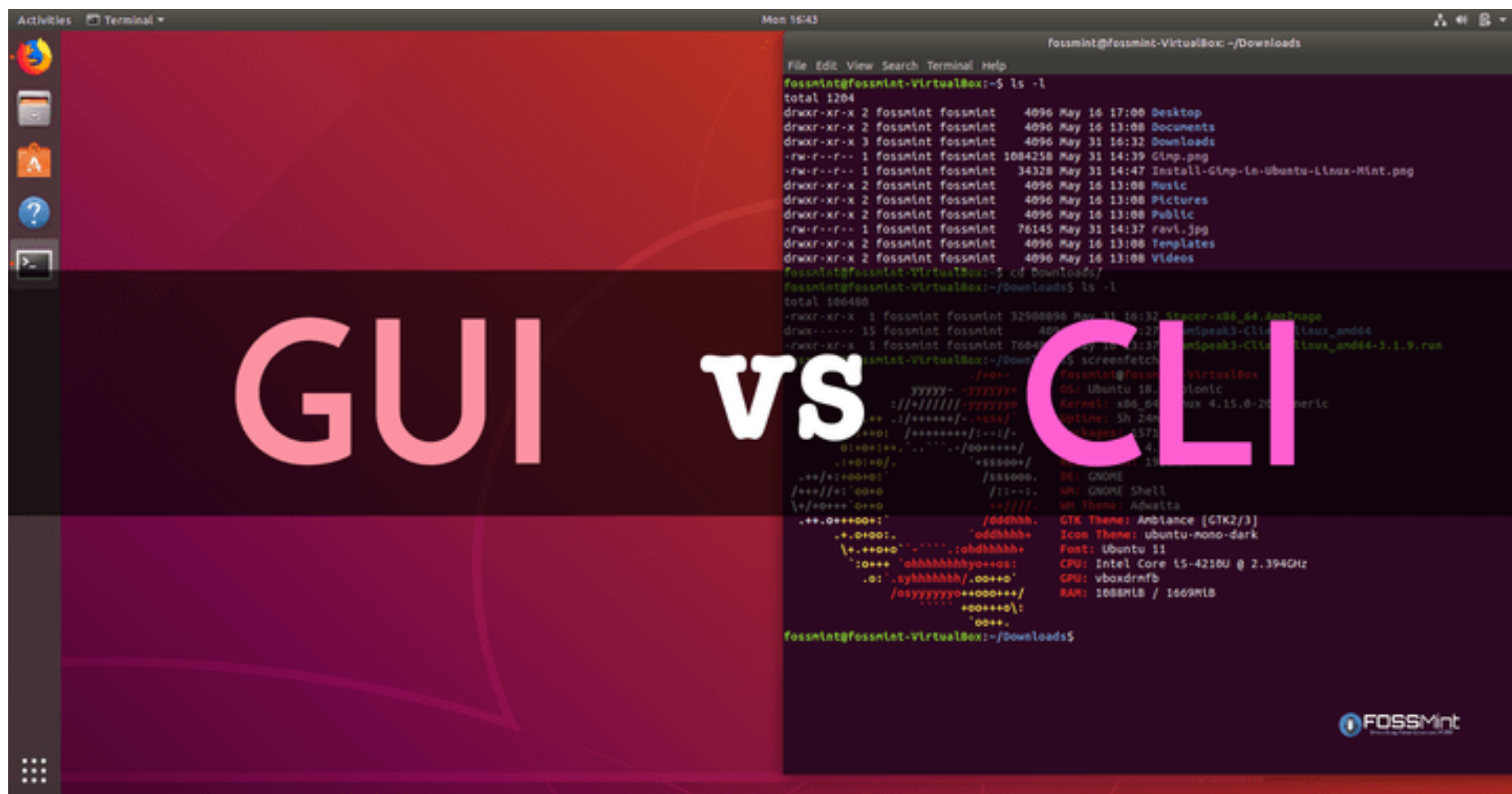
Recorded by Mobizen

What is user interface (UI)?

The user interface (UI) is the point of human-computer interaction and communication

What is "the Shell"?

The shell is a program that takes commands from the keyboard and gives them to the operating system to perform. Nowadays, we have *graphical user interfaces (GUIs) shell* in addition to *command line interfaces (CLIs) shell*.



- graphical user interface (GUI) is a digital interface in which a user interacts with graphical components such as icons, buttons, and menus.



What is a command-line interface?

A command-line interface (CLI) is a text-based user interface (UI) used to run programs, manage computer files and interact with the computer. Command-line interfaces are also called *command-line user interfaces*, *console user interfaces* and *character user interfaces*. CLIs accept as input commands that are entered by keyboard; the commands invoked at the command prompt are then run by the computer.

Why we need the command line???



Why we need the command line???

- There are some tasks can't be done by GUI.
- To know more details in the background programs and files.

How write the command line??

TERMINAL ???





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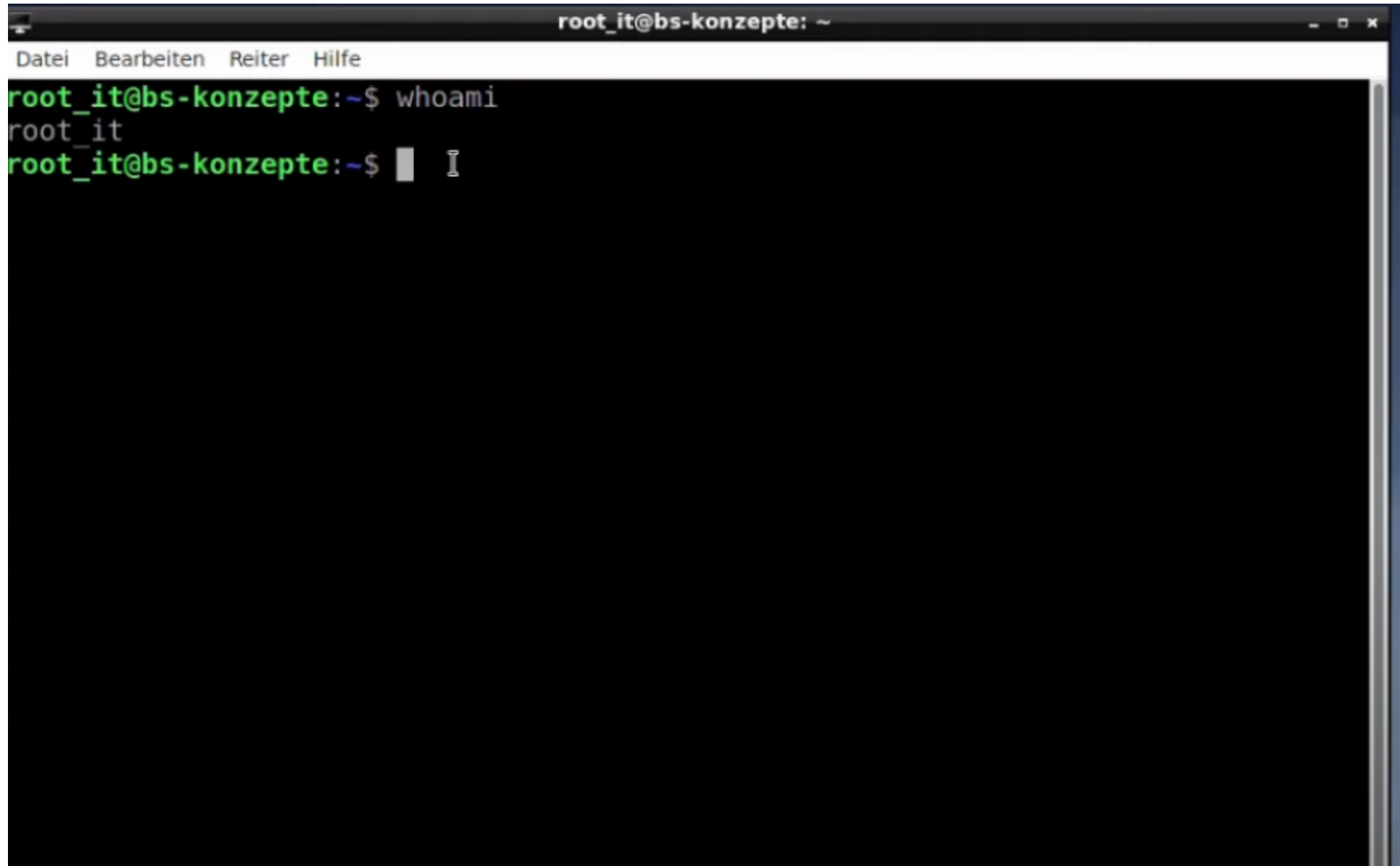
What's a "Terminal?"

It's a tool which you can use to pass your shell commands.

- This is a program that opens a black window and lets you interact with the shell. There are a bunch of different terminal emulators we can use.

Essential command lines

“Whoami” to know the user name.

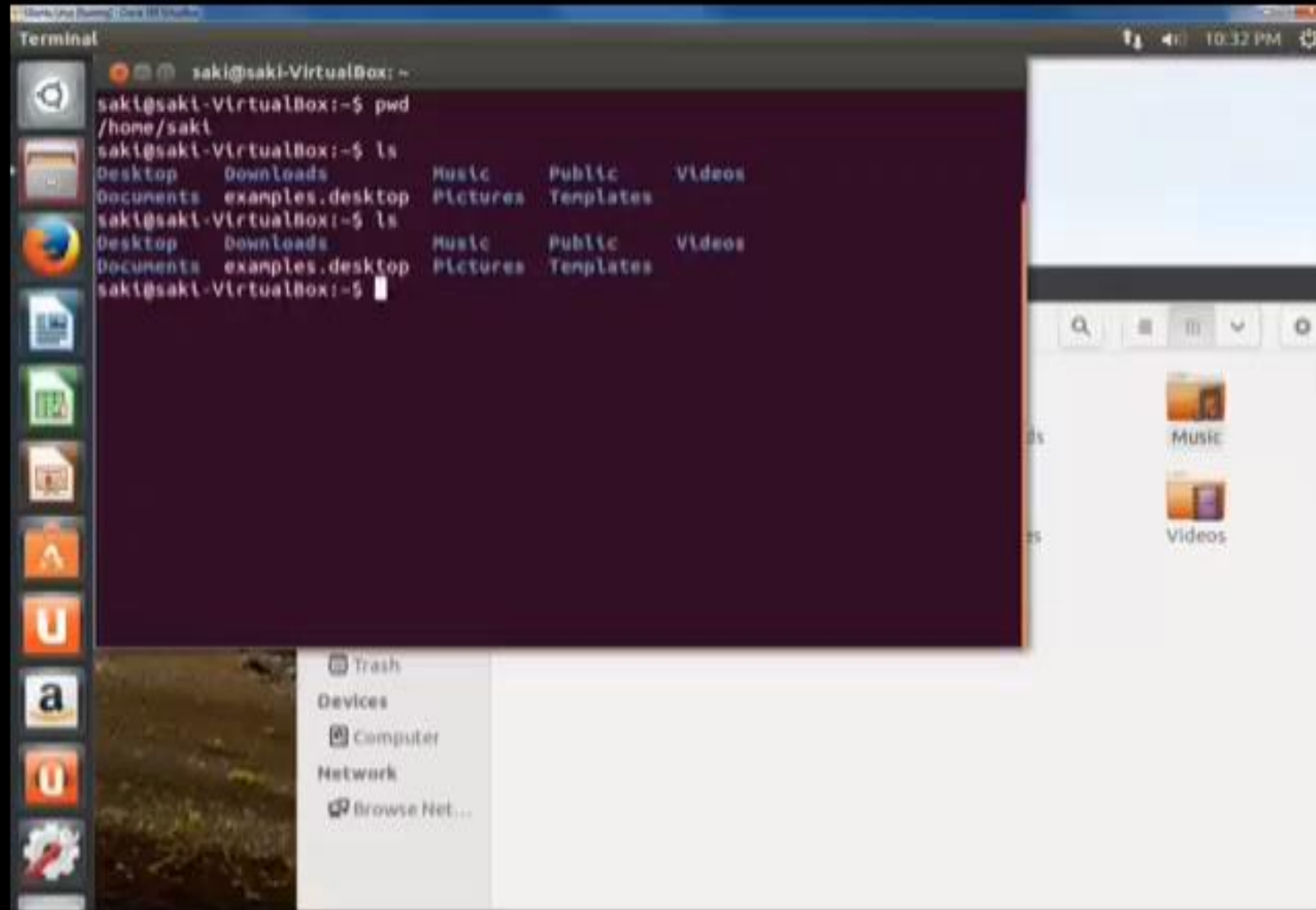
A screenshot of a terminal window with a dark background. The window title bar at the top reads 'root_it@bs-konzepte: ~'. Below the title bar is a menu bar with the options 'Datei', 'Bearbeiten', 'Reiter', and 'Hilfe'. The terminal shows a green prompt 'root_it@bs-konzepte:~\$' followed by the command 'whoami'. The output of the command is 'root_it', displayed on the next line. Below the output, the prompt 'root_it@bs-konzepte:~\$' is shown again, followed by a cursor and a small icon.

```
root_it@bs-konzepte: ~  
Datei Bearbeiten Reiter Hilfe  
root_it@bs-konzepte:~$ whoami  
root_it  
root_it@bs-konzepte:~$ █ I
```



Recorded by **Mobizen**

- Pwd: print working directory
- Ls: list content of current directory
- Check from GUI



ls command: list contents of current directory

Recorded by **Mobizen**

- Clear: clear the screen
- Cd: used to navigate between directories and folders
- Cd.. get up to original directory
- cd∇/ get up to root directory



```
Terminal
saki@saki-VirtualBox: ~/Music
Desktop Downloads Music Public Videos
Documents examples.desktop Pictures Templates
saki@saki-VirtualBox:~$ cd Downloads
saki@saki-VirtualBox:~/Downloads$ pwd
/home/saki/Downloads
saki@saki-VirtualBox:~/Downloads$ ls
saki@saki-VirtualBox:~/Downloads$ cd ..
saki@saki-VirtualBox:~$ cd /
saki@saki-VirtualBox:/$ ls
bin dev initrd.img lib64 mnt root selinux var vmlinuz
boot etc initrd.img.old lost+found opt run srv usr vmlinuz.old
cdrom hone lib media proc sbin sys var
saki@saki-VirtualBox:/$ cd home
saki@saki-VirtualBox:/home$ ls
saki
saki@saki-VirtualBox:/home$ cd saki
saki@saki-VirtualBox:~$ ls
Desktop Downloads Music Public Videos
Documents examples.desktop Pictures Templates
saki@saki-VirtualBox:~$ cd Music
saki@saki-VirtualBox:~/Music$ pwd
/home/saki/Music
saki@saki-VirtualBox:~/Music$ ls
saki@saki-VirtualBox:~/Music$
```

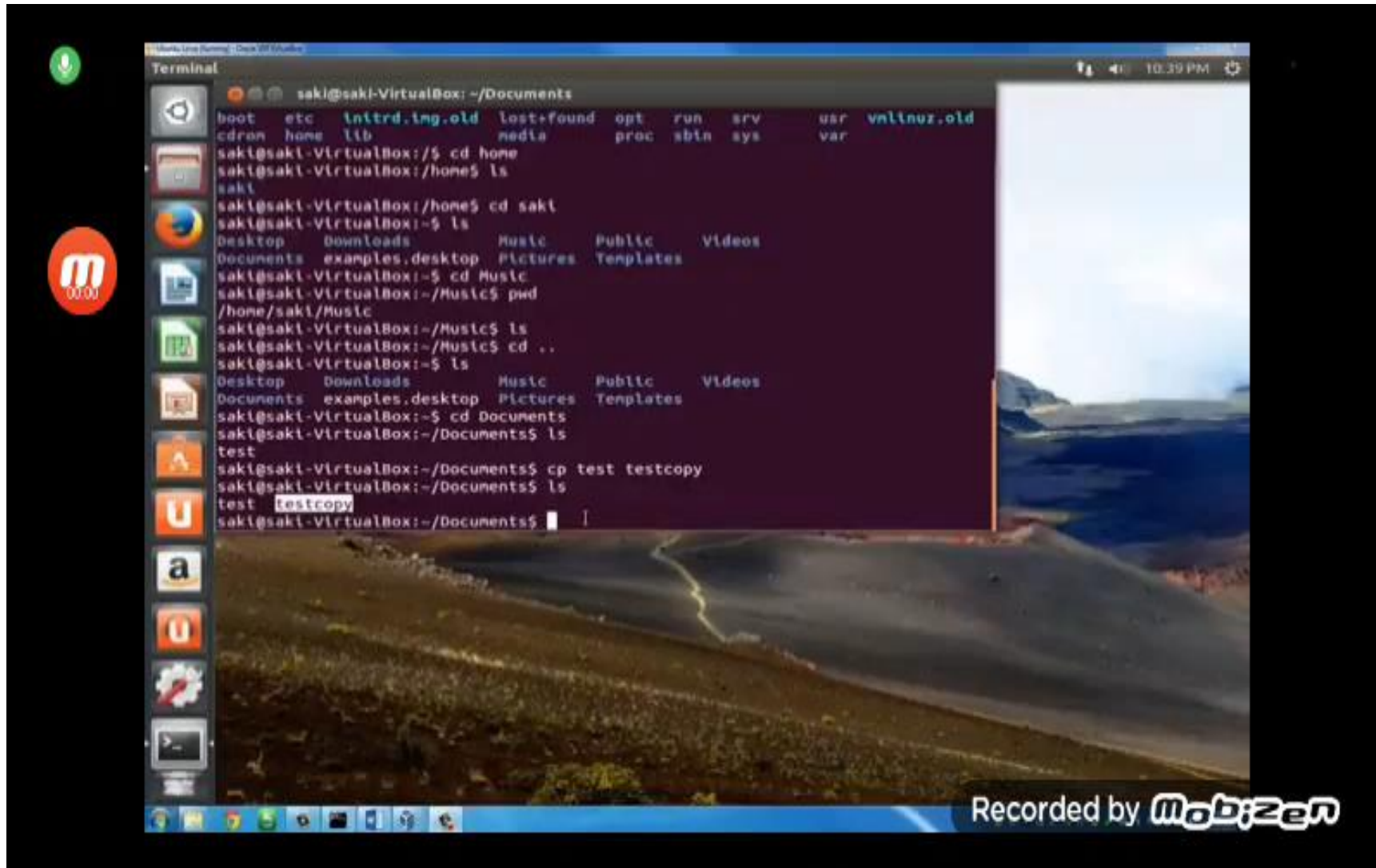
cp command: copy files

Recorded by **MobiZen**

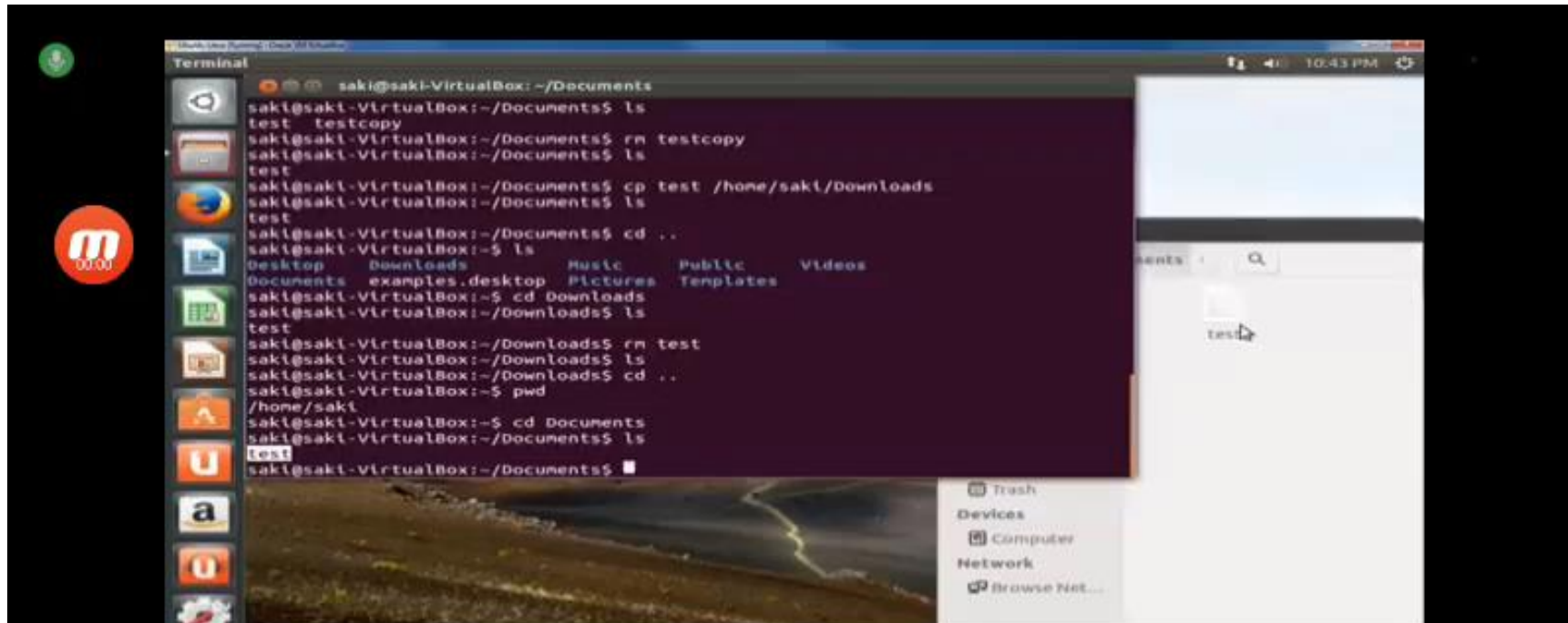
- CP: copy files

-

- Cp filename copy-filename



- Rm: remove files
-
- Rm filename



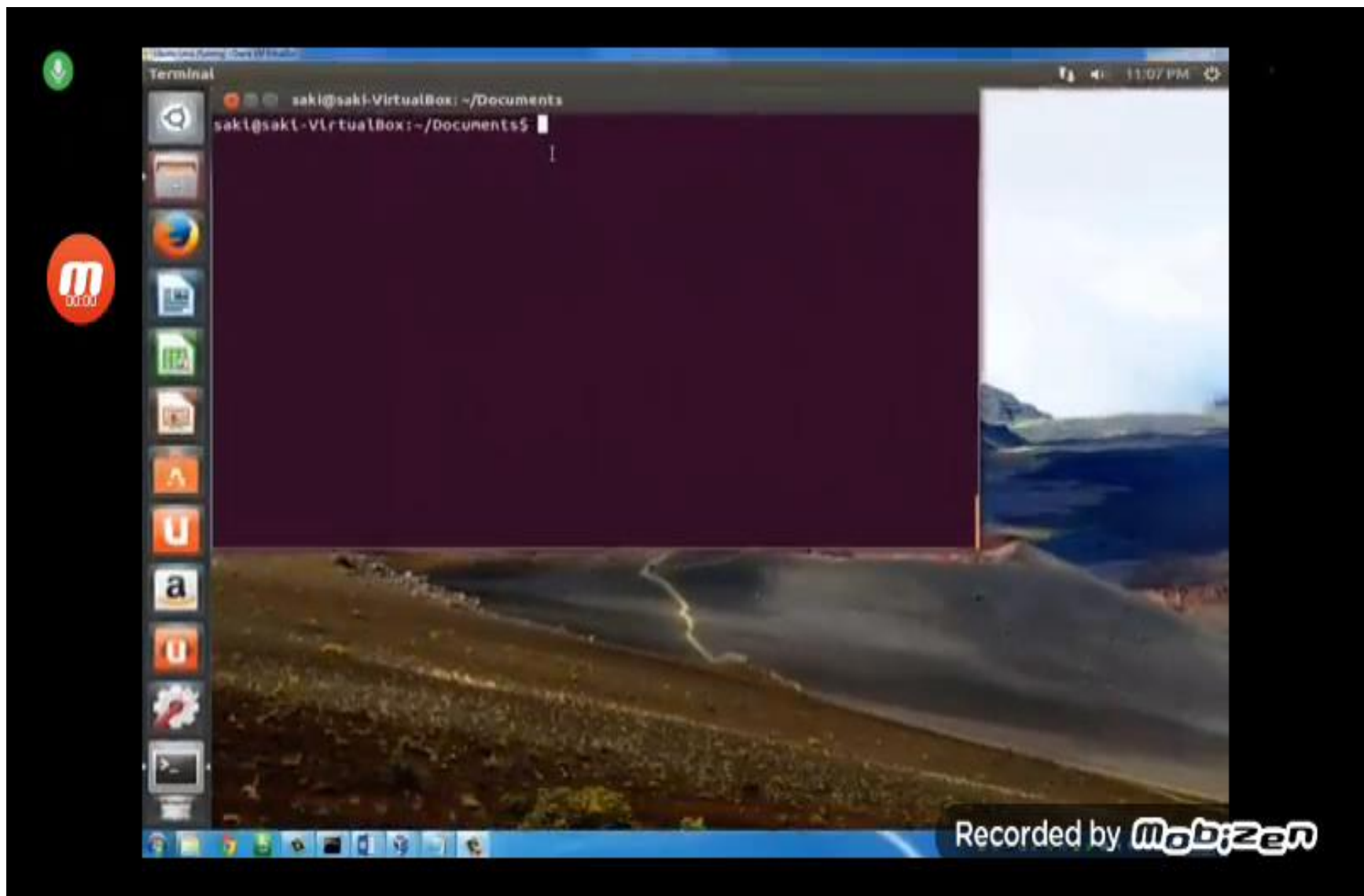
The screenshot displays a Linux desktop environment. On the left is a vertical dock with application icons, including a red circular icon with a white 'm' and '00:00' text. The background is a landscape image of a field and a lake. A terminal window is open in the center, showing a series of commands and their outputs. To the right, a file manager window is partially visible, showing a search bar and a file named 'test'.

```
saki@saki-VirtualBox: ~/Documents
saki@saki-VirtualBox:~/Documents$ ls
test testcopy
saki@saki-VirtualBox:~/Documents$ rm testcopy
saki@saki-VirtualBox:~/Documents$ ls
test
saki@saki-VirtualBox:~/Documents$ cp test /home/saki/Downloads
saki@saki-VirtualBox:~/Documents$ ls
test
saki@saki-VirtualBox:~/Documents$ cd ..
saki@saki-VirtualBox:~$ ls
Desktop Downloads Music Public Videos
Documents examples.desktop Pictures Templates
saki@saki-VirtualBox:~$ cd Downloads
saki@saki-VirtualBox:~/Downloads$ ls
test
saki@saki-VirtualBox:~/Downloads$ rm test
saki@saki-VirtualBox:~/Downloads$ ls
saki@saki-VirtualBox:~/Downloads$ cd ..
saki@saki-VirtualBox:~$ pwd
/home/saki
saki@saki-VirtualBox:~$ cd Documents
saki@saki-VirtualBox:~/Documents$ ls
test
saki@saki-VirtualBox:~/Documents$
```

mkdir command: create a new folder
rmdir command: delete an empty folder

Recorded by **Mobizen**

- Mkdir: create new folder
- Mkdir directory-name
- Rmdir: delete a directory
- Rmdir directory-name



- Man : describe the command
- Man command
- Click q to exit the command details

Sheet

Select the following answer:

1. Theis the point of human-computer interaction and communication

a. UI b. GNU c. Computer system d. shell

2. The is a program that takes commands from the keyboard and gives them to the operating system to perform

a. UI b. shell c. GNU d. computer system

3. The Is the libraries to operate the applications

a. UI b. shell c. GNU d. computer system

4.is a digital interface in which a user interacts with graphical components such as icons, buttons, and menus

a. CLI b. GUI c. UI d. all the above

5. Is command used to print working directory
a. Pwd b. Cd c. CP d. Man
6. Is command used to list content of current directory
a. Pwd b. Cd c. CP d. Ls
7. Is command used to clear the screen
a. Pwd b. Clear c. CP d. Man
8. Is command used to navigate between directories and folders
a. Pwd b. Cd c. CP d. Man
9. Is command used to copy files
a. Pwd b. Cd c. CP d. Man
10. Is command used to remove files
a. Rm b. Cd c. CP d. Man
11. Is command used to create new folder
a. Pwd b. Cd c. Mkdir d. Man
11. Is command used to delete a directory
a. Pwd b. Cd c. Mkdir d. Rmdir

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11. Is command used to delete a directory

- a. Pwd b. Cd c. Mkdir d. **Rmdir**