

# Operating Systems

**BS ARTIFICIAL INTELLIGENCE & MULTIMEDIA GAMING- FALL-2024**

**LAB – 01**

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# BASICS OF OPERATING SYSTEMS

- ▶ Contents:
  - ▶ Introduction to Operating Systems
  - ▶ Objectives of an Operating System
  - ▶ Functions of an Operating System
  - ▶ Types of Operating Systems
  - ▶ Components of an Operating System
  - ▶ Evolution of Operating Systems
  - ▶ Real-World Examples and Case Studies
  - ▶ Why Study Operating Systems?

# DOS Commands

Command	Description
cd	Used to change the directory (to insider or come out).
date	Used to know and modify system date.
time	Used to know the system time and to modify also.
prompt	Used to design the appearance of a drive letter.
cls	Used to clean the screen content.

# Current Directory Commands

cmd C:\Windows\system32\cmd.exe

Microsoft Windows [Version 10.0.19045.3086]  
(c) Microsoft Corporation. All rights reserved.

C:\Users\Lenovo>cd..

# Root Directory Commands

cmd C:\Windows\system32\cmd.exe

Microsoft Windows [Version 10.0.19045.3086]  
(c) Microsoft Corporation. All rights reserved.

C:\Users\Lenovo>cd..

C:\Users>cd/

# Check Date & Time

cmd C:\Windows\system32\cmd.exe - time

Microsoft Windows [Version 10.0.19045.3086]  
(c) Microsoft Corporation. All rights reserved.

C:\Users\Lenovo>cd..

C:\Users>cd/

C:\>date

The current date is: Sun 07/16/2023

Enter the new date: (mm-dd-yy)

C:\>time

The current time is: 16:59:00.71

Enter the new time:

# Check Date & Time using 'Prompt' Command

```
C:\>prompt $d
```

```
Sun 07/16/2023
```

```
Sun 07/16/2023prompt
```



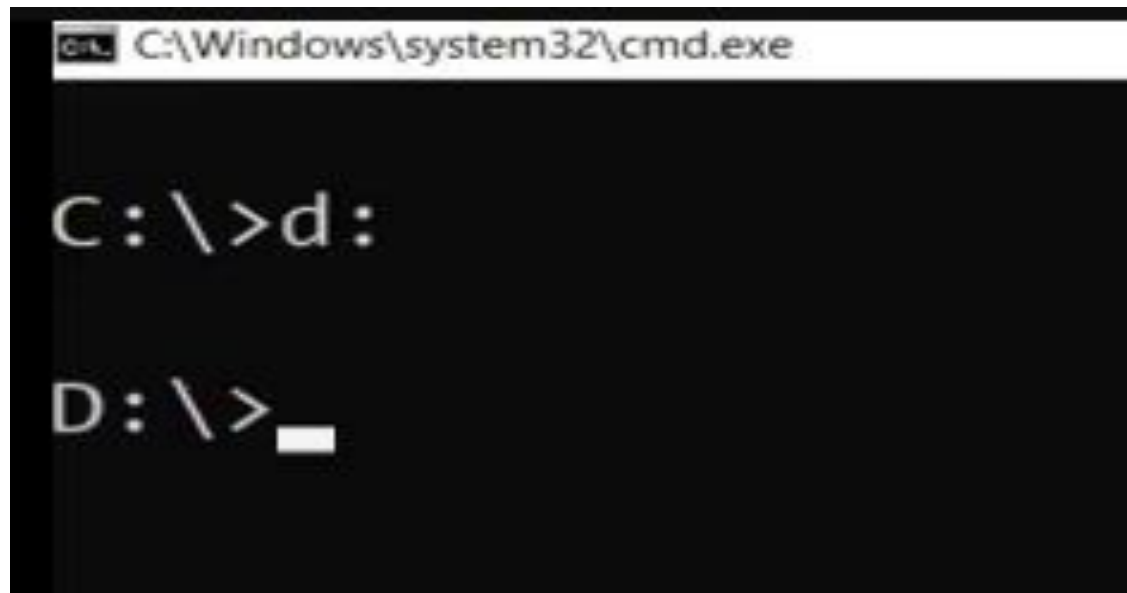
# Directory Related Command

Command	Description
md	Used to create directory in the disk.
rd	Used to remove (delete) empty directory.
dir	Display all the content of disk page wise.
path	Used to inform about the location of commands.
copy con	Used to create the file in the disk.

# Directory Related Command

Command	Description
ren	Used to change the name of any directory.
type	Used to view the content of any file.
fc	Used to compare two files.
findstr	Used to locate files containing a specific string of plain text.
del	Used to delete the files.

# Change The Directory



```
C:\Windows\system32\cmd.exe

C:\>d:

D:\>_
```

A screenshot of a Windows Command Prompt window. The title bar at the top reads "C:\Windows\system32\cmd.exe". The command prompt shows the current directory as "C:\>". The user has entered the command "d:", which has been executed, resulting in the prompt changing to "D:\>". A small white cursor is visible after the prompt.

# Creating The Directory

C:\Windows\system32\cmd.exe

```
C:\>d:
```

```
D:\>md pract1
```

```
D:\>_
```

# Check The Number of Directories in Drive D

```
D:\>rd pract2
```

```
D:\>dir
```

```
Volume in drive D has no label.
```

```
Volume Serial Number is D0A5-724B
```

```
Directory of D:\
```

07/16/2023	05:03 PM	<DIR>	exam
07/16/2023	05:03 PM	<DIR>	paper
07/16/2023	05:07 PM	<DIR>	pract1
		0 File(s)	0 bytes
		3 Dir(s)	270,280,429,568 bytes free

# Check The Current Path

```
D:\>path
```

```
PATH=C:\Windows\system32;C:\Windows;C:\Windows\System32\Wbem;C:\Windows\System32\WindowsPowerShell\v1.0\;  
C:\Windows\System32\OpenSSH\;C:\Users\Lenovo\AppData\Local\Microsoft\WindowsApps;
```

# Creating File

```
D:\>copy con abc.txt  
This is my first program.  
Hello  
^Z
```

# File Renaming



```
C:\Windows\system32\cmd.exe  
  
D:\>ren abc.txt computer.txt  
  
D:\>
```

A screenshot of a Windows command prompt window. The title bar at the top reads "C:\Windows\system32\cmd.exe". The main area of the window is black with white text. It shows the command prompt "D:\>" followed by the command "ren abc.txt computer.txt". Below this, another "D:\>" prompt is visible, indicating the command has been executed.



# Checking The Contents of The File

```
D:\>type abc.txt
The system cannot find the file specified.

D:\>type computer.txt
This is my first program.
Hello
```

# Opening The File

```
D:\>computer.txt
```

```
D:\>_
```

# Comparing Two Files

```
D:\>copy con b.txt
What is your name?
^Z

        1 file(s) copied.

D:\>fc computer.txt b.txt
Comparing files computer.txt and B.TXT
***** computer.txt
This is my first program.
Hello How are you?
***** B.TXT
What is your name?
*****
```

# Comparing Two Files & Delete a File

```
D:\>findstr my computer.txt  
This is my first program.
```

```
D:\>del b.txt
```

# LAB Task!

Command	Description
move	Allows users to transfer files or directories from one directory to another, or from one drive to another.
set	Display the current environment variables.
ver	Displays the version of MS-DOS
echo	Without parameters to display the current echo setting.



**End of Lecture!**