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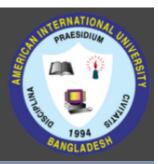


Course Code: CSC 2209 Course Title: Operating Systems

Dept. of Computer Science Faculty of Science and Technology

Lecturer No:	01	Week No:	01	Semester:	
Lecturer:	Name & email				

Lecture Outline



- What is Shell and it's types
- 2. kernel Version
- Current Directory
- 4. Is Command
- 5. Directory Creation
- 6. Directory Change
- 7. Empty File Creation

What Is a Shell?

- A shell is a program that provides an interface between a user and an operating system (OS) kernel. An OS starts a shell for each user when the user logs in or opens a terminal or console window.
- Also known as terminal, console
- Also known as Command Line Interface (CLI)

Types of shells

- ☐ In UNIX/Linux there are two major types of shells:
- ☐ The Bourne shell. If you are using a Bourne-type shell, the default prompt is the \$ character.
- The C shell. If you are using a C-type shell, the default prompt is the % character.
- There are again various subcategories for Bourne Shell which are listed as follows:
 - Bourne shell (sh)
 - ☐ Korn shell (ksh)
 - ☐ Bourne Again shell (bash)
 - □ POSIX shell (sh)
- ☐ The different C-type shells follow:
 - ☐ C shell (csh)
 - ☐ TENEX/TOPS C shell (tcsh)

Kernel Version

- Open the **Terminal**.
- Enter uname -r this will show you what kernel version you have.
- Architecture (32bit or 64bit)
- This is useful if you want to determine which architecture are you running, 86, 64 or 32 bit.
- Open the Terminal.
- Enter uname -m this will show you what architecture you are running.

Current Directory

- Your shell has a current directory the directory in which you are currently working
 - Commands like 'ls' use the current directory if none is specified
 - Use the pwd (print working directory) command to see what your current directory is:

\$ **pwd** /home/fred

Is command

■ Is is one of the most used basic linux commands, used to print contents of a directory, by default it lists contents of current working directory(pwd).

How to create a directory

- To create a directory in UNIX or Linux using the mkdir command pass the name of directory to the mkdir command.
- The mkdir command makes new, empty, directories

Syntax: \$ mkdir directory_name

Example: \$ mkdir OS1

How to create multiple directories

■ To create multiple directories in UNIX or Linux using the mkdir command pass the names of directories to be created to the mkdir command. The names of directories should be separated by spaces.

mkdir foo bar baz

☐ foo bar baz

Change directory

- Change the current directory with cd:
 - ☐ Syntax: \$ cd /folder/subfolder
 - Syntax \$ cd dir_name/ path_name
 - ☐ Example: \$ cd /desktop/os
- You can check changed directory using pwd
- \$ pwd
 - ☐ /desktop/os
- Use cd without specifying a path to get back to your home directory

Current, Parent, and Hidden Directories

- The special . and .. directories don't show up when you do ls They are hidden directories,
 - means current directory
 - .. means parent directory
- Directories name starting with . are considered 'hidden'
- Make Is display all files and directories, even the hidden ones, by giving it the -a (all) option:

\$ **ls** –a

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□ To go to parent directory we can use \$ cd ..

How to Create an Empty File

The following touch command creates an empty (zero byte) new file called test.

Syntax: touch file_name

>> touch test.txt

Books



- Unix Shell Programming
 - ☐ Written by Yashavant P. Kanetkar