UNIX_User_Course_Details

1. UNIX Introduction

- Syllabus
- Assignments
- Books
- History of UNIX
- The UNIX philosopy, GUI
- Introduction to UNIX
- The Shell:
  - Executing commands and command options
  - Interactive features: job control, history
- The UNIX file system

2. File Creation and Displaying

- Creating files – using > symbol
- Redirection – using >> symbol
- Redirecting Input – using < symbol
- Displaying Files – cat, more
- Piping – using | symbol
- Word Count
- Sorting a file
- Removing duplicates
- Transliteration
- Using Head and Tail command in files

3. Files Handling

- Creating directory
- Moving files to directories
- Copying files to directories
- Changing directory
- Removing files and directories
- Special Files – . and ..
- Creating Aliases
- Using Aliases

4. The UNIX File Utilities

- File Utilities (cp, mv, rm, etc.)
- comm, cmp, diff
- Tree walking: find, xargs

5. Processes and Filters

- UNIX Processes
- Pipes
- Tees
- Signals
- Process Utilities (ps, kill, wait, sleep)
- Filters: cat, head, tail, sort, uniq

6. Cut and Paste

- Displaying selected characters – using cut
- Displaying selected fields – using delimiters
- Displaying selected files – using paste
- Using paste with delimiters

7. GREP and EGREP

- Displaying content of the file using GREP
- Displaying content of the file using EGREP
- EGREP Meta-character
- Back Referencing concepts

8. ZIP & TAR

- Zipping a file
- Unzipping a file
- Combining a set of files using TAR
- Extracting TAR file
- Using TAR with ZIP

9. FIND command

- Searching for a file – using find
- Finding List of files and directories
- Finding Last modified files
- Find with -exec
- Find with -xargs

10. Handling Jobs

- Using /dev/null
- Foreground Jobs
- Background Jobs – &
- Stopping Jobs – kill
- Changing Permissions – chmod

11. Introduction to Shell

- Basics of Shell
- Set and Unset a variable
- Displaying – using echo
- Using Expr
- Using Test
- Getting input – using read
- Header file of shell script – using hashbang (#!)
- Sample Shell script program

12. Command Substitution

- Assigning a command to a variable
- Storing output to a variable
- Assigning global value – using Export

13. Command Line Arguments

- Passing input in runtime.
- Using input inside a program

14. Conditional & Looping Statement

- Using if statement
- Using if –else statement
- Using Nested if statement
- Using 'While' Loop
- Using 'Until' Loop
- Using 'For' Loop
- Using CASE

15. Functions

- Creating a function
- Calling a function in file
- Calling a function in another file

16. Advanced Commands

- SED
- Replacing values in a file
- STTY
- TOP
- Sending an email – using MAIL
- HERE DOCUMENT

17. Editors

- NANO
- PICO
- GEDIT
- Vi Editor

18. AWK

- Basics of AWK
- Displaying values – using awk
- Using awk in Shell script

19. Scheduler

- Scheduling a job – using 'Crontab'
- Scheduling a job – using 'at'

20. Advanced Shell Scripting

- Monitoring a file
- Extracting data from HTMl/XML file

***21.* Database Connectivity**

- Connecting MYSQL to Shell
- Running SQL queries from Shell Script

22. CGI Programming

- bash/ksh
- KornShell 93
- Extended patterns
- Examples of shell scripts
- Introduction to HTML, WWW and CGI
- Web servers, HTTP
- KornShell for CGI
- Forms

23. Perl

- Perl Modules
- Perl for CGI
- CGI examples

24. Perl Programming Tools

- make, nmake, gmake
- rcs, cvs, sccs
- ar, tar, cpio, pax
- RPM, autoconfig
- dbx, gdb

25. Linux Basic Administration

- Overview of Linux Admin tasks
- Startup sequence
- Login
- Users and permissions
- mount, df, fsck, dd
- lpr
- NFS