## **Unit-1 Introduction of Basic Shell Scripting**

- What is Scripting?
- What is Shell Scripting?
- Why We need Shell Scripting?
- What is OS?
- What is application?
- What is Shell?
- Types of shell available in LINUX?
- What is kernel?
- Kernel Task?
- Relation between shell and kernel?
- How to check login shell and kernel release?
- How to write any simple Bash Scripting?
- What is shebang in script file?
- What is comment section in script file?
- What is program body in script file?
- How we can run any scripting manually?
- How we can run any scripting using crontab?
- What is the use of echo command?
- What is the use of variable in programming?
- Types of variable ?
- What is the use of Quotes in scripting?
- Types of Quotes in scripting?
- What is the use of expr command?
- Expr examples ?
- Numbers adding examples ?
- Use of read command?
- Reading User Input
- Usage of date & cal command in script?
- Hello World Bash Shell Script
- Simple Backup Bash Shell Script

## **Day - 2 Conditional Statements**

- If then- fi
- If-then-else-fi
- If-then-elif-elif-else-fi

### **Arithmetic comparison operator**

- Numeric comparison operator
- String comparison operator
- File testing operator

#### **Logical operator**

- AND
- OR
- NOT

Examples of if statement with three types of operator

## **Day - 3 Loop Example**

- 1- What is the use of Loop?
- 2- Types of Loop?
  - FOR Loop
  - SELECT Loop
  - WHILE Loop
  - UNTIL Loop

Examples of Loop Concept in shell scripting?

Examples of infinite Loop?

Examples of Sleep command in Loop?

Break and continue examples in Shell Scripting?

Example of exit operator in Shell Scripting?

## **Day - 4 Case & Function Examples**

- Case Examples without Loop
- Case Examples with Loop
- What is the use of Function in Shell Script?
- What is the use of Nested Function in Shell Script?

## **Day - 5 Special types of Symbols in Shell Scripting**

- Pipe symbol
- Usage of semicolon
- Usage of > and >> symbols
- Tee command example
- Input, Output and Error Redirections Symbols
- STDIN, STDOUT & STDERR
- Find & locate
- Less & more

## Day - 6 & 7 Useful utilities for Shell Scripts

- cat,
- tac
- head
- tail
- sed
- date
- cal
- grep
- egrep
- fgrep

- tr
- cut
- awk
- Sort
- Uniq
- here Operator
- du, df, lsblk, fdisk

Examples of Every command in shell scripting?

## Day - 8 Array & Network Based Example in Shell Scripting

- Array examples
- Network based automatic backup script
- SSH Based Examples
- FTP based examples
- NFS based Examples
- SAMBA based Examples
- Database based Examples

# **Day-9 Positional Parameter and shift operator**

## Day-10 Advanced Shell Scripting with GUI based tool

- Reading input with read
- Shell Functions
- Reading Options with getopts
- Signal Handling with trap
- Implementing Simple Menus with select
- Dialog Boxes with dialog
- Yes/No Box(yesno)
- Message Box(msgbox)
- Input Box(input box)
- Text Box(text box)
- Menu Box(menu)
- Check List Box(checklist)
- Radio List Box(radio list)
- progress Meter Box(gauge)
- Special Variable Substitution Operators for Bash
- Debugging Shell ScriptsSample ScriptsBottom of Form