Bourne Again Shell (BASH) Scripting

Introduction to BASH Command Line Interface (CLI)

- Identify BASH installation & key configuration files on RedHat & Debian GNU/Linux distros
- .profile/.bash_profile/.bashrc/.bash_history
- Identify & use common built-in BASH commands (pwd,cd,set,unset,export,source,etc.)
- BASH Command-line Expansion
- Brace Expansion
- Tilde Expansion
- Parameter & variable Expansion
- Command Substitution
- BASH Reserved words
- BASH History identification & configuration
- Aliases (ls,du,df,rm,cp)
- Backticks - command expansion & execution
- BASH Prompt configuration
- Command chaining
- Error level/Return code (Command Exit Status) identification
- Conditional execution of subsequent commands (&&,||)

Redirection | Error Handling

- Standard Input
- Direct input from **STDIN** (Standard Input)
- Redirect input from a file
- Standard Output
- Direct output to **STDOUT** (Standard Output)
- Redirect output to a file
- Append Standard Output to an existing file
- Standard Error
- Explore **STDERR** attributes
- Redirect Standard Error
- Input/Output (I/O) Redirection

- Pipes
- Sequential execution via pipes
- Quoting & Escaping

BASH Scripting

- Basic Script definition (hello world), permissions modification & execution
- Internal BASH variables
- Global Variable definition
- Function definition
- Local Variable definition - function scope
- BASH Arrays
- **Loops**
- Menu creation using Select
- Job control - Foreground/Background processing
- **Conditionals**
- Case - Concise Conditional Branching
- Positional Parameters