PERL Scripting - Course Contents

<u>Day - 1</u>

- ❖ Introduction to PERL
- Comments
- Reading from Standard Input
- Writing to Standard Output
- Scalar Variables Numbers and Strings
- Use of Single Quotes and Double Quotes
- Escape Sequence and its Usage
- Use of 'chop' and 'chomp' functions

Day - 2

- Conditional Statements
- ❖ Simple IF Statements
- ❖ Simple IF ... ELSE Statements
- ❖ Multilevel IF ... ELSE Statements
- Looping Statements
- FOR Loop
- FOREACH Loop
- ❖ WHILE Loop
- ❖ DO ... WHILE Loop
- ❖ DO ... UNTIL Loop

Day <u>- 3</u>

- ❖ Additional Control Statements
- UNLESS Statements
- UNTIL Statements
- Loop Control Statements
- LAST statement
- ❖ NEXT statement
- REDO statement
- CONTINUE statement
- Command Line Arguments

- Arithmetic Operators
- Comparison Operators Numbers and Strings
- Logical Operators

- Assignment Operators
- Concatenation Operators
- Conditional Operators
- String Repetition Operators

- Array Variables
- Definition
- Accessing the Elements of an Array Variable
- String Substitution
- Ranges and Expressions
- Copying Arrays
- Array within Array

Day - 6

- Arrays Contd.,
- Size and Maximum Index of an Array
- Using Array Slices
- Reading an Array from Standard Input
- PUSH function
- POP function
- SHIFT function
- UNSHIFT function
- ❖ REVERSE function
- **❖** SORT function
- Splitting and Merging the Arrays

Day - 7

- File Handling
- Opening and Closing a File
- Different types of File Modes
- Reading the contents from file
- Use of 'die' and 'warn' statements
- Reading file to array variables
- Writing the contents to the file
- Standard error file

- File Handling Contd.,
- Status of a File
- File Test Operators
- Introduction to Hash Variables
- Definition of Hash Variables
- Accessing the Hash Variables

- Hashes Contd.,
- ❖ Adding the elements to the Hash Variable
- Removing the elements from the Hash Variable
- ❖ KEYS function
- ❖ VALUES function
- **❖** EACH function
- **❖** EXISTS function
- ❖ DELETE function

Day - 10

- Subroutines
- Defining and Invoking a Subroutine
- Forward Referencing
- Passing parameters to the Subroutine
- Returning a Value from Subroutine
- BEGIN predefined function
- END predefined function
- ❖ AUTOLOAD predefined function

Day - 11

- Use of 'strict' pragma
- Defining the scope of Variables MY, OUR and LOCAL

- Regular Expressions
- Pattern Matching
- Binding Operator (Match Operator)
- Use of Metacharacters
- Anchors
- Alternatives

- Regular Expressions Contd.,
- Character Range Escape Sequences
- Understanding \$`, \$' and \$&
- Quantifiers
- Specifying Choices
- Reusing Portions of Patterns
- Pattern Sequence Scalar Variables

Day - 14

- Regular Expressions Contd.,
- Pattern Matching Options
- Finding the Match Location
- Substitution Operator
- Translation Operator

Day - 15

- Introduction to References
- Using the Backslash Operators
- References to Subroutines
- Special Array Indices
- ❖ Use of Default Variables '\$_' and '@_'

Day - 16

- Concepts
- Arrays of Arrays
- Arrays of Hashes
- Hashes of Hashes
- Hashes of Arrays

<u>Day - 17</u>

- Understanding Packages and Libraries
- "use" and "require" functions
- ❖ %INC and @INC Variables
- Concepts of Modularity

- Process Management
- "system" function and interacting with the shell
- "exec" function
- ❖ %ENV hash variable
- Use of back quotes

Day - 19

- Database Access using DBI Module
- DBI Architecture
- Notations and Conventions
- Database Connection
- INSERT Operation and using BIND values
- SELECT Operation and using BIND values

Day - 20

- ❖ DBI Module Contd.,
- UPDATE Operation and using BIND values
- ❖ DELETE statement
- ❖ Using "do" statement
- COMMIT Operation
- * ROLLBACK Operation
- Automatic Error Handling
- Disconnecting Database
- Using NULL values

Day - 21

- Introduction to PERL OOPS
- Working with Objects
- Turning tasks into OO Programs
- OOPS Terminologies
- Creating own classes
- ❖ 'REF' Operator
- ◆ 'BLESS' Method
- Storing Attributes

- Creating Constructor
- Considering Inheritance

- Providing Attributes
- Creating Methods
- Distinguishing class and object methods
- Get-Set Methods
- Class Attributes

- Privatizing the Methods
- Utility Methods
- Destructor
- Complete Class
- ❖ Adding new methods
- Overriding methods

EXPERIENCE IN PERL (FEW)

- ❖ Worked in Several Projects to accomplish the following requirements:
 - 10 Years of Relevant Experience in PERL
 - Experienced in Telecom Domain
 - Data Extraction from Log Files
 - Parse the XML Files (XML Parser)
 - Load the data to Database based on several scenarios, after extracting from XML
 Files and Log Files
 - Regular Expression on various patterns
 - Front End Development using PERL-CGI
 - Report Generation