

## Perl Scripting & using Perl in Test Automation

### Course Contents

#### Basic Perl:

##### 1. Introduction to Perl

- a. What is Perl
- b. Perl History
- c. Writing first Perl script
- d. Executing Perl scripts

##### 2. Basic Data Types

- a. Scalar Data types
- b. Variable Interpolation
- c. Escape sequences
- d. Numeric Function Interpolation
- e. String Functions

##### 3. Operators in Perl

- a. Arithmetic Operators
- b. Comparison Operators
- c. Logical Operators
- d. Auto Increment / Decrement Operators
  - i. With Numerics & Strings
  - ii. With Strings
- e. String Repetition Operators

##### 4. Lists and Array Variables

- a. Introduction to Lists
- b. Introduction to Arrays
- c. Fast creation and access
- d. Operations on Lists and Arrays
- e. Built-in Array functions

##### 5. Control Structures

- a. Conditional Statements
- b. Single line conditions statements
- c. Relational & Logical Operators
- d. Control Loops
  - i. For loop in perl
  - ii. Foreach loop in perl
  - iii. do / redo statements
  - iv. next, last, continue keywords

##### 6. Hashes in Perl (Associative Arrays)

- a. What are Associative Arrays?
- b. Difference between Arrays and Associative Arrays.
- c. Creating Associative Arrays and access elements
- d. Built-in Hash functions

##### 7. Command Line Arguments Processing

- a. How to process CLA's
- b. ARGV array
- c. Shift Operator

## 8. Process Management

- a. Backsticks
- b. qx
- c. system
- d. function

## 9. File System Interaction

- a. What is a file?
- b. Various modes of file operations.
- c. File Handles and File Handling
- d. File and Arrays
- e. File handle switches viz -e, -f, -d, -b, -z, -s etc
- f. Error Handling
- g. Directory Processing

## 10. Using Subroutines

- a. What are subroutines in Perl
- b. Defining and invoking Subroutines
- c. Returning Values from a subroutines
- d. Variable scoping
- e. Passing arguments to a subroutine
- f. Nested subroutine calls
- g. System defined subroutines i.g. BEGIN, END, AUTOLOAD

## 11. Regular Expressions (aka RegEx)

- a. Introduction to Pattern matching
- b. Wildcards and Character Classes
- c. Recovering previous matches
- d. Greedy and Minimal Searching
- e. Substitution
- f. Translations

## Advance Perl:

### 12. Perl Modules and Packages

- a. What are packages and Modules
- b. Using Modules in perl scripts
- c. Introduction to basic CPAN modules
  - DBI module
  - Excel Module
  - FTP Module

## Perl in Test Automation:

In the below modules we will cover the below items:

- a. Important functions available in the module
- b. Sample scripts by using the module

### 13. Test::Simple Module

### 14. Test::More Module

### 15. Test::Harness Module

### 16. WWW::Mechanize Module

### 17. HTTP::Recorder Module

### 18. Win32::IEAutomation Module

### 19. DBI Module

### 20. Net::FTP Module

### 21. Spreadsheet Module