

**PERL (2 Days)**

**Pre-requisite:**

- a) knowledge of a programming language like 'C'
- b) Knowledge of OO language like C++ or Java preferable

**Course Content**

**Day 1:**

- Introduction to Perl?
- Simple Inout / Output statements
- Scalar variables
- Operators
  - Arithmetic operators
  - Relational operators
    - On numbers
    - On Strings
  - Logical operators
  - String operators
  - Bitwise operators
  - Assignment operators
- Lists
- Control Structures
  - Selection
    - If
    - Nested if
    - else
  - Looping
    - For
    - Foreach
    - While
    - Until
  - Special Statements
    - Last
    - Next
    - redo
- Arrays
  - Initialization
  - Traversal
  - Functions on arrays
    - Shift, unshift
    - Push, pop
    - Reverse
    - Sort
  - Code block with sort
  - Array sections / slices

**Functions**

- Definition
- Invocation
  - With ( )
  - With &
- Return value
- Parameters
- Scope
  - global

My  
Local  
Recursion

### **Associative Arrays**

Associative arrays  
Creating Associative arrays  
Accessing Elements of Associative Arrays  
Keys  
Values  
Each

### **Day 2:**

#### **Pattern Matching & Regular Expression**

- Match Operators
- Special variables
- Single character pattern
  - Character class
  - Inversion of pattern matching
- Multiple character pattern
  - Closure
  - Positive closure
  - Optional
  - Alternator
- Anchoring
- Memory
- The Substitution Operator
- The Translation Operator

#### **Reference:**

Reference to Scalars  
Reference to Arrays  
Reference to Hashes

Dynamic Memory Management and garbage collection

Arrays of Arrays  
Structures  
Nested Structures  
Array of Structures

#### **Files**

Open  
Close  
Modes  
Read  
Write  
Append  
Input / output  
Output of program as input to a command  
Input to the program from output of a command

Diamond operator  
Inplace replacement of files

**Introduction to Object Oriented Programming Package**

- Module
- Objects
- Blessing an object with a module name
- Class and instance methods

- Inheritance
- Polymorphism
- Overriding