

Perl Fundamentals

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Meet the expert: Chris Penick is CISSP certified and has been a consultant and CISSP trainer in the technology industry for the past 20 years. During that time, he has worked as Principal Learning Consultant for Symantec, webmaster for the FDA, cyber-warfare scenario developer, technical investigator and forensic analyst for a private security firm. His past government clients include all branches of the United States Military, the Department of Commerce, the IRS, the U.S. Custom and Immigration Service, the Executive Office of the President, and state and local governments in Maryland, Michigan, Virginia, and the District of Columbia. His corporate clients include Guess, Inc., EMC, Raytheon, Lockheed Martin, and the Discovery Channel.

Prerequisites: This is an entry level course. Some amount of programming experience will be helpful and speed up your learning but you can jump right into this course at any level.

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Course description: With the long-awaited upgrade to the popular scripting language Perl finally here, there's no better time than the present to dive in and learn. Join CISSP-certified trainer Chris Penick as he explains how Perl's human-friendly linguistic approach makes it an easy language for novice coders to learn.

Course outline:

Introduction to Perl

- Introduction
- What Is Perl?
- Perl History
- Why Use Perl?
- As Larry Wall Says...
- Do You Have Perl?
- Which Perl?
- General Syntax
- Demo: Perl Version
- Demo: Hello World
- Demo: Manually Run Script
- Summary

Literals and Variables

- Introduction
- Numeric Literals
- String Literals
- Arithmetic Operators
- Augmented Operators
- Logical Operators
- String Operators
- Demo: Arithmetic Operators
- Demo: String Operators
- Demo:
- Summary

String Functions

- Introduction
- String Functions
- Demo: String Functions

- Summary

Variables

- Introduction
- Variable Context
- Types of Variables
- Default Scalar Variable \$_
- Default Array Variables
- Variable Interpolation
- Demo: Variables
- Summary

Conditionals

- Introduction
- If... Else Statements
- Boolean Logic
- Unless... Else Statements
- Summary

Loops

- Introduction
- For Loops
- Foreach Loop
- While Loop
- Until Loop
- Foreach Loops and Arrays
- Moving Around in a Loop
- Conditional Logic Shortcuts
- Demo: For Loop
- Demo: More Loops
- Summary

Lists

- Introduction
- Lists

- List Element Access
- Computing Elements
- Maximum Element
- Going out of Bounds
- List Literals
- List Assignment
- Arrays
- Find the Last
- Array Interpolation
- Sorting Arrays
- Manipulating Arrays and Strings
- Strings to Arrays: Split
- Split on Any Character
- Split on Multiple White Space
- Join
- Adding or Removing Items
- Summary

List Demos

- Introduction
- Adding or Removing Items
- Demo: Add or Remove Items
- Demo: Arrays and Scalars
- Demo: Interpolating Arrays
- Demo: Split and Join
- Summary

Command Line Input

- Introduction
- Simple Input
- Chomp

- Chop
- Simple Output
- Command Line Arguments
- Demo: Input and Output
- Demo: Command Line
- Summary

File Input and Output

- Introduction
- Handling Files
- Handling Files, Cont.
- File Test Operators
- Demo: Working with Files
- Demo: Diamond and File Checks
- Summary

Hashing

- Introduction
- Hashes
- Adding a New Key-Value Pair
- Changing the Value of a Key
- Hashes and Foreach
- Hashes and Sorting
- Demo: Create Hash
- Demo: Hash Sort Check
- Demo: Hash with Foreach
- Summary

Subroutines

- Introduction
- The undef Value
- Detecting undef
- Define a Subroutine

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- Invoke a Subroutine
- Return Values
- Demo: Subroutines
- Summary

Arguments and Return Values

- Introduction
- Arguments
- Private Subroutine Variables
- Variable Argument Lists
- Using My
- Use Strict
- Return Values
- Demo: Arguments
- Demo: Return
- Summary

Simple Regular Expressions

- Introduction
- Regular Expressions
- A Simple Pattern
- Match Binding Operator
- The Match Operator
- Demo: Simple Pattern
- Demo: Match Bind Operator
- Summary

Metacharacters

- Introduction
- Regular Expression Types
- Match Position
- Match a Set of Characters
- Ranges of Regular Expressions
- Ranges of Digits
- Negating Ranges
- Dot Metacharacter
- Literal Metacharacters
- Patterns Provided in Perl
- Pipe Alternatives
- Question Mark Quantifier
- Asterisk Quantifier
- Plus Quantifier
- Demo: Regex
- Demo: Regex Patterns
- Summary

Text Manipulations

- Introduction
- Substituting Text
- Special Match Variables
- Capture Groups
- Global Modifier
- Demo: Substitution
- Demo: Greedy Substitution
- Demo: Before and After
- Summary