KOENIG SOLUTIONS · COURSE OUTLINE

AIX Shell Programming (IBM)

Learn to write and debug AIX shell scripts, from variables and arithmetic to loops, functions and menu-driven applications.

10	38	12
MODULES	TOPICS	HANDS-ON EXERCISES

COURSE OVERVIEW

This course reviews core AIX commands before introducing shell script creation, naming and execution. It covers environment and local variables, integer arithmetic, and handling run-time data through the read command and command line arguments. It then addresses conditional execution with if and test, additional Korn, Bash and POSIX syntax, loop constructs such as while, until and for, multi-branch case statements for menu-driven applications, and finally the creation of functions and function libraries.

WHO THIS COURSE IS FOR

- **Shell Script Developers**
- **System Administrators**
- **AIX Administrators**
- **Unix Programmers**
- **Automation Engineers**

LEARNING OBJECTIVES

- Apply basic AIX commands for file and directory handling
- Create and execute shell scripts following naming guidelines
- Assign and reference environment and local variables
- Perform integer arithmetic using expr and (( )) notation
- Handle run-time data with the read command and arguments
- Implement conditional execution using if and test statements
- Apply loop constructs such as while, until and for
- Develop functions and organise them into a function library

COURSE SYLLABUS

10 Modules, 38 Topics

01

AIX Command Review

TOPICS

- Basic Unix commands
- General commands
- File and directory handling commands
- Filename generation characters and regular expressions (regex)
- I/O Redirection features
- Other commands

02 Exercise

Getting Started

TOPICS

What is a shell script? · Development guidelines · Creating and editing shell scripts · Naming and storing shell scripts · Executing shell scripts

03 Exercise

Using Variables

TOPICS

Environment variables · Local variables · Assigning values to variables · Assessing variable values · Using quotes · Delimiting variable names · Echo control sequences

04 Exercise

Integer Arithmetic

TOPICS

Using the expr command · Using the (( )) notation

05 2 Exercises

Handling Run Time Data

TOPICS

The read command · Command line arguments

06 Exercise

Conditional Execution

TOPICS

The if statement · The test command

07 Exercise

Additional Korn, Bash & POSIX Syntax

TOPICS

Other test notations · Default and substitute variables · Exit status codes

08

3 Exercises

Loop Constructs

TOPICS

The while loop · The until loop · The for loop · The while true and until false loops · Loop control commands

09

Exercise

Multi-Branch Decisions

TOPICS

The case statement · Menu driven applications

10

Exercise

Functions

TOPICS

What is a function? · Syntax · Examples · Creating a Function Library

HANDS-ON EXERCISES

Practise What You Learn

#	MODULE	ACTIVITY
02	**Getting Started**	Write a simple shell script
03	**Using Variables**	Add variables to a script
04	**Integer Arithmetic**	Add integer arithmetic to a shell script
05	**Handling Run Time Data**	■ Writing a generic shell script ■ Writing an interactive shell script
06	**Conditional Execution**	Adding validation to previous scripts
07	**Additional Korn, Bash & POSIX Syntax**	Exercise
08	**Loop Constructs**	■ Enhancing the previously written scripts ■ Writing a script to copy files using a 'for' loop ■ Writing a script to generate numbers with the 'while' loop
09	**Multi-Branch Decisions**	Developing and writing a menu system
10	**Functions**	Add a function to a script

WHAT IS INCLUDED

Everything You Need to Succeed

- Koenig course material for every module
- Delivery by certified instructors and subject matter experts
- Hands-on exercises throughout the course
- Course completion certificate from Koenig

ABOUT KOENIG

Who We Are

Established in 1993, Koenig Solutions is a globally recognised training provider with 35+ technology partnerships, 5,000+ training programmes and a network of certified instructors and subject matter experts, supporting individuals and enterprise teams worldwide.

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