

LINUX Shell Scripting Contents

Chapter	Table of Contents
Introduction Operating System and UNIX	
	What is an OS?
	History of UNIX.
	What is UNIX and Why?
	Introduction to UNIX Architecture (Kernel, Shell and Commands)
	Connecting to UNIX (Telnet , Terminal Emulators)
	Login and Logout
File Management and Directory Management	
	What is file?
	File Operations (Listing, View, Copy, Rename, Delete, Move, Create)
	File Operation Commands
	o ls
	o cat
	o cp
	o rm
	o mv
	o touch
	Directory Operations (Listing, Rename, Delete, Move, Create)
	Directory Operation Commands
	o cd
	o pwd
	o mkdir
	o rmdir
	Misc commands
Redirections	
	Standard Input, Outputs and Error Outputs
	Redirections (>, <, >>, 2>)
	Appending - >>
	^d, ^z, ^c
Wild Characters, Substitution and Searching & Pipers & Filters	
	The directories. and ...
	Absolute and Relative Path
	Wild Characters (? , * and [])

	Search Commands
	o find
	o locate
	o grep
	Pipers and Filters
	o wc
	o more
	o sort
	o tail
	o head
File Editing	
	vi editor
	o Modes
	o Insert, append (character, line)
	o Delete (letter, word, line)
	o Copy (word, line)
	o Paste
	o Search
	o Save and Quit
Introductions to Shell Programming	
	What is Shell?
	Types of shells
	Running a Shell Script
Variables	
	Declaring, Assigning and Printing
	Rules for Naming variables
	Local Variables
	Scalar Variables
	Environment Variables
	o USER
	o HOME
	o HOST
	o PATH
Arithmetic Expressions	
	Operators (+, -, *, /, %)
	expr and test command
	Quotes

Decision Making	
	<ul style="list-style-type: none"> • if ...else...fi
	<ul style="list-style-type: none"> • Comparison Operators <ul style="list-style-type: none"> ○ equals -eq ○ not equals -ne ○ less Than -lt ○ less than or equal to -le ○ greater than -gt ○ greater than or equal to -ge
	<ul style="list-style-type: none"> • File Test Operators <ul style="list-style-type: none"> ○ non empty file -s ○ normal file -f ○ directory file -d ○ writeable file -w ○ read-only file -r ○ file is executable -x
	<ul style="list-style-type: none"> • String Comparison Operators <ul style="list-style-type: none"> ○ equal == ○ NOT equal !=
	<ul style="list-style-type: none"> • Logical Operators <ul style="list-style-type: none"> NOT ! AND -a OR -o
	<ul style="list-style-type: none"> • Case statement
Looping	
	<ul style="list-style-type: none"> • for loop
	<ul style="list-style-type: none"> • while loop
Command Line Arguments	
	<ul style="list-style-type: none"> • \$0, \$1, \$2,...
	<ul style="list-style-type: none"> • shift command
	<ul style="list-style-type: none"> • Exit status \$?
Users and Groups	
	<ul style="list-style-type: none"> • passwd

	<ul style="list-style-type: none">• Access Rights (r,w,x)
	<ul style="list-style-type: none">• Changing the Rights - chmod
Process and Jobs	
	<ul style="list-style-type: none">• Foreground and Background Process
	<ul style="list-style-type: none">• Process Status - ps<ul style="list-style-type: none">○ Listing Oracle or JAVA processes
	<ul style="list-style-type: none">• kill
	<ul style="list-style-type: none">• jobs
	<ul style="list-style-type: none">• Scheduling
Advance Programming	
	<ul style="list-style-type: none">• "AWK" Programming
	<ul style="list-style-type: none">• "sed" programming
	<ul style="list-style-type: none">• Soft links & hard links
	<ul style="list-style-type: none">• Oracle DB connectivity, connecting from Linux to Database
	<ul style="list-style-type: none">• Export command