

Advanced UNIX Scripting: SED and AWK

Introduction.....	1
Is This Class Right for You?.....	2
UNIX Fundamentals	4
A Brief History of UNIX	4
UNIX Philosophy.....	4
UNIX Culture.....	6
Why UNIX?	6
Open Source.....	7
Programming Languages and Text Processors.....	8
Scripting Languages.....	8
Text Processing.....	8
Programming 101.....	10
UNIX Editors	11
Using vi.....	11
Basic Shell Programming	14
Specifying the Shell	14
Assigning Variables	14
Writing if Statements	15
Writing for Loops	15
Writing while Loops	16
Writing case Statements.....	16
Exercise 1: Basic Shell Programming.....	17
Solving Practical System Problems (Project 1)	19
Good Practices	21
Exercise 2: Solving Practical Problems	22
Regular Expressions.....	23
Using sed.....	26
Substitution	27
Delete	28
Insert	29
Append.....	30
Change	31
List	31
Transform.....	32

Print.....	32
Next.....	33
Quit.....	33
Exercise 3: Regular Expressions and Basic sed.....	34
Writing sed Scripts.....	36
Understanding Pattern Space.....	36
Exercise 4: sed Scripts.....	37
Using awk.....	38
Writing awk Script Files.....	39
Exercise 5: awk Scripts.....	42
awk Programming Concepts.....	43
Conditional Statements.....	43
Loops.....	44
Arrays.....	45
Functions.....	46
Exercise 6: Advanced awk Programming.....	48
Appendix A: vi Commands.....	49
Appendix B: awk Expressions and Operators.....	53
Appendix C: Solutions to Exercises.....	55