

Index

2	admin	4, 88
3	alias	93
4	alias substitution	24
5	AND lists	51
6	appending redirected output	41
7	ar	95
8	archives	
9	ar command	95
10	arithmetic expansion	37
11	arithmetic language	
12	bc	145
13	asa	100
14	asynchronous lists	50
15	at	102
16	awk	110
17	actions	121
18	arithmetic functions	123
19	escape sequences	119
20	expression patterns	121
21	expressions	113
22	functions	123
23	grammar	127
24	input/output and general functions	125
25	lexical conventions	133
26	output statements	122
27	overall program structure	112
28	pattern ranges	121
29	patterns	120
30	regular expressions	119
31	special patterns	120
32	string functions	124
33	user-defined functions	126
34	variables and special variables	117
35	background work	
36	at	102
37	batch	142
38	bg	158
39	crontab	230
40	fg	346
41	jobs	411
42	nice	545
43	nohup	556
44	renice	629
45	basename	139
46	batch	142
47	bc	145
	grammar	146
	lexical conventions	148
	operations	150
	operators	150
	bg	158
	break special built-in	68
	c89	161
	external symbols	165
	standard libraries	164
	cal	169
	calendar	4, 171
	can	6
	cancel	4, 173
	carriage-control characters	100
	case conditional construct	53
	cat	175
	cc	178
	external symbols	182
	cd	185
	cflow	4, 188
	character counting	832
	charmap	
	with localedef	452
	writing names with locale	447
	checksums	
	cksum	201
	sum	696
	chgrp	191
	chmod	193
	grammar	195
	chown	198
	cksum	201
	cmp	204
	codeset conversion	398
	tr	729
	col	4, 207
	colon special built-in	69-70
	comm	210
	command	213
	command search and execution	47
	command substitution	36
	communications commands	
	cu	241
	mail	479
	mailx	483
	talk	704

48	uucp.....	770	df.....	269
49	uudecode.....	774	diff.....	272
50	uuencode.....	776	default output format.....	274
51	uulog.....	779	directory comparison format.....	273
52	uuname.....	781	-c or -C output format.....	275
53	uupick.....	783	-e output format.....	274
54	uustat.....	786	-f output format.....	275
55	uuto.....	789	dircmp.....	4, 278
56	uux.....	792	directory commands	
57	write.....	842	cd.....	185
58	compilers		pwd.....	624
59	c89.....	161	directory lister.....	467
60	cc.....	178	dirname.....	280
61	fort77.....	362	dis.....	4, 283
62	yacc.....	850	disk space commands	
63	compound commands.....	52	df.....	269
64	compress.....	218	du.....	285
65	compression		ulimit.....	742
66	compress.....	218	documentation.....	518
67	pack.....	565	dot special built-in.....	71
68	pcat.....	595	double-quotes.....	20
69	uncompress.....	753	du.....	285
70	unpack.....	767	duplicating an input file descriptor.....	42
71	zcat.....	865	duplicating an output file descriptor.....	42
72	configuration values.....	380	echo.....	287
73	consequences of shell errors.....	44	ed.....	290
74	control characters		addresses.....	292
75	in stty.....	692	append command.....	294
76	copy files commands		change command.....	294
77	cp.....	221	commands.....	293
78	cpio.....	226	copy command.....	299
79	dd.....	258	delete command.....	294
80	ln.....	444	edit command.....	294
81	mv.....	538	edit without checking command.....	295
82	pax.....	581	filename command.....	295
83	tar.....	707	global command.....	295
84	cp.....	221	global non-matched command.....	299
85	cpio.....	4, 226	help command.....	296
86	cpio format		help-mode command.....	296
87	in pax.....	587	insert command.....	296
88	crontab.....	230	interactive global command.....	295
89	csplit.....	234	interactive global not-matched command.....	299
90	ctags.....	4, 237	join command.....	296
91	cu.....	4, 241	line number command.....	300
92	cut.....	245	list command.....	296
93	cxref.....	4, 249	mark command.....	296
94	date.....	252	move command.....	297
95	field descriptors.....	252	null command.....	300
96	modified field descriptors.....	253	number command.....	297
97	dd.....	258	print command.....	297
98	delta.....	4, 266	prompt command.....	297

99	quit command	297	magic command	327
100	quit without checking command	297	map command	316
101	read command	298	mark command	317
102	regular expressions	292	mesg command	327
103	shell escape command	300	move command	317
104	substitute command	298	next command	317
105	undo command	299	number command	317
106	write command	299	number option	327
107	editors		open command	317
108	ed	290	paragraphs option	327
109	ex	307	preserve command	318
110	sed	647	print command	318
111	vi	799	prompt command	328
112	egrep	302	put command	318
113	env	304	quit command	318
114	escape character (backslash)	20	read command	318
115	escape sequences		readonly command	328
116	awk	119	recover command	318
117	gencat	372	redraw command	328
118	lex	428	regular expressions	324
119	eval special built-in	72	remap command	328
120	ex	307	replacement strings	324
121	abbrev command	313	report command	328
122	addressing	311	resubstitute command	323
123	adjust window command	322	rewind command	319
124	append command	313	scroll command	324, 328
125	args command	314	sections command	329
126	autoindent option	325	set command	319
127	autoprint option	325	shell command	319
128	autowrite option	326	shell option	329
129	beautify option	326	shift left command	323
130	change command	314	shift right command	323
131	chdir command	314	shiftwidth option	329
132	command descriptions	312	showmatch option	329
133	copy command	314	showmode command	329
134	delete command	314	slowopen command	329
135	directory option	326	source command	319
136	edcompatible option	326	substitute command	319
137	edit command	315	suspend command	320
138	edit options	325	tabstop option	330
139	errorbells option	326	tag command	320
140	escape command	322	tags command	330
141	execute command	324	term command	330
142	execr command	326	terse command	330
143	file command	315	unabbrev command	320
144	global command	315	undo command	321
145	ignorecase option	326	unmap command	321
146	insert command	316	visual command	321
147	join command	316	warn command	330
148	lisp command	327	window command	330
149	list command	316, 327	wrapmargin option	331

150	wrapscan option	331	tail	701
151	write command	321	tr	729
152	write line number command	324	tsort	736
153	writeln option	331	unexpand	755
154	xit command	322	uniq	761
155	yank command	322	uudecode	774
156	EX	8	uuencode	776
157	exec special built-in	73	file permission commands	
158	exit special built-in	74	chgrp	191
159	exit status and errors	44	chmod	193
160	exit status for commands	44	chown	198
161	expand	333	umask	744
162	export special built-in	75	file searching	
163	expr	335	egrep	302
164	matching expression	337	fgrep	348
165	string operand	337	grep	389
166	extended regular expression		file tree commands	
167	in awk	110	cpio	226
168	in cp	224	diff	272
169	in find	356	dircmp	278
170	in grep	389	find	353
171	in mv	540	ls	467
172	in pax	585	mkdir	523
173	extension		rmdir	638
174	EX	8	tar	707
175	JC	9	filters	
176	false	339	asa	100
177	fc	341	awk	110
178	fg	346	col	207
179	fgrep	348	compress	218
180	field splitting	38	dd	258
181	FIFO special files	526	expand	333
182	file	350	fold	359
183	file comparisons		head	396
184	cmp	204	iconv	398
185	comm	210	line	434
186	diff	272	more	528
187	dircmp	278	nl	548
188	uniq	761	pack	565
189	file conversion		paste	568
190	cut	245	pax	581
191	dd	258	pcat	595
192	expand	333	pg	597
193	fold	359	pr	602
194	head	396	read	626
195	join	414	sed	647
196	od	559	tail	701
197	paste	568	tee	711
198	patch	572	tr	729
199	sort	670	uncompress	753
200	strings	682	unexpand	755

201	unpack	767	localedef.....	452
202	zcat	865	logger	456
203	find.....	353	logname	458
204	FIPS.....	8	lp	460
205	fold.....	359	lpstat.....	4, 464
206	for loop.....	52	ls.....	467
207	fort77.....	362	m4	4, 473
208	external symbols.....	365	macro processor.....	473
209	standard libraries.....	365	mail.....	4, 479
210	function definition command	54	mailx.....	483
211	fuser.....	367	change current directory.....	493
212	gencat.....	370	change folder.....	494
213	escape sequences.....	372	command escapes	499
214	get	4, 373	commands.....	492
215	getconf	380	copy messages	493
216	getopts	385	declare aliases	492
217	grep.....	389	declare alternatives	493
218	grouping commands.....	52	delete aliases.....	498
219	hash	393	delete messages	493
220	head.....	396	delete messages and display.....	494
221	here-document	41	direct messages to mbox.....	496
222	history command		discard header fields.....	493
223	fc.....	341	display beginning of messages.....	498
224	iconv	398	display current message number.....	499
225	id	400	display header summary	495
226	if conditional construct.....	53	display list of folders	494
227	implementation-dependent.....	6	display message.....	496
228	ipcrm	403	display message size.....	498
229	ipcs.....	405	echo a string.....	494
230	JC	9	edit message.....	494, 499
231	jobs.....	411	execute commands conditionally	495
232	join	414	exit	494
233	kill	418	follow up specified messages	495
234	legacy.....	6	help.....	495
235	lex.....	4, 423	hold messages	495
236	actions	430	internal variables.....	489
237	definitions.....	425	invoke a shell.....	498
238	escape sequences.....	428	invoke shell command	499
239	regular expressions	427	list available commands	496
240	rules.....	427	mail a message	496
241	table sizes	426	null command	499
242	user subroutines	427	pipe message	496
243	libraries		process next specified message.....	496
244	ar command.....	95	quit.....	497
245	line	4, 434	read mailx commands from a file	498
246	line counting.....	832	receive mode	483
247	link.....	436	reply to a message.....	497
248	lint.....	4, 438	reply to a message list	497
249	lists.....	49	retain header fields.....	497
250	ln	444	save messages	497
251	locale	447	scroll header display.....	499

252	send mode.....	483	nice.....	545
253	set variables.....	498	nl.....	548
254	start-up.....	489	nm.....	4, 552
255	touch messages.....	498	nohup.....	556
256	undelete messages.....	498	OB.....	9
257	unset variables.....	499	object files.....	552
258	write messages to a file.....	499	od.....	559
259	make.....	4, 503	OF.....	9
260	default rules.....	513	OP.....	9
261	inference rules.....	510	open file descriptors for reading and writing....	43
262	internal macros.....	511	OR lists.....	51
263	libraries.....	511	pack.....	4, 565
264	macros.....	509	paginators	
265	makefile execution.....	507	more.....	528
266	makefile syntax.....	506	pg.....	597
267	target rules.....	507	parameter expansion.....	33
268	man.....	518	parameters and variables.....	27
269	may.....	6	paste.....	568
270	mesg.....	521	patch.....	572
271	message catalogue generation.....	370	filename determination.....	575
272	mkdir.....	523	patch application.....	575
273	mkfifo.....	526	patchfile format.....	574
274	more.....	528	pathchk.....	577
275	discard and refresh.....	534	pathname expansion.....	39
276	display position.....	536	pathname manipulation	
277	examine new file.....	535	basename.....	139
278	examine next file.....	535	dirname.....	280
279	examine previous file.....	535	pathchk.....	577
280	go to beginning of file.....	533	pattern matching	
281	go to tag.....	536	definition.....	64
282	help.....	532	in case statements.....	53
283	invoke editor.....	536	in cpio.....	227
284	mark position.....	534	in find.....	353
285	move backward one screenful.....	532	in pax.....	585
286	move forward one screenful.....	532	in shell variables.....	34
287	quit.....	536	in uux.....	794
288	refresh the screen.....	534	pattern matching notation.....	64
289	repeat search.....	535	pattern scanning and processing language	
290	repeat search in reverse.....	535	at.....	110
291	return to mark.....	534	patterns matching a single character.....	64
292	return to previous position.....	534	patterns matching multiple characters.....	65
293	scroll backward one half screenful.....	533	patterns used for filename expansion.....	66
294	scroll backward one line.....	533	pax.....	581
295	scroll forward one half screenful.....	533	cpio file data.....	589
296	scroll forward one line.....	533	cpio filename.....	589
297	search backward for pattern.....	535	cpio header.....	587
298	search forward for pattern.....	534	cpio special entries.....	589
299	skip forward one line.....	533	extended cpio format.....	587
300	must.....	6	extended tar format.....	590
301	mv.....	538	pcat.....	4, 595
302	newgrp.....	542	pg.....	4, 597

303	PI	9
304	pipelines	49
305	positional parameters	27
306	pr	602
307	print-related commands	
308	cancel	173
309	fold	359
310	lp	460
311	lpstat	464
312	pr	602
313	printf	607
314	process status report	618
315	prs	4, 612
316	ps	618
317	pwd	624
318	quote removal	39
319	quoting	20
320	read	626
321	readonly special built-in	76
322	redirecting input	40
323	redirecting output	41
324	redirection	40
325	regular expressions	
326	in awk	118
327	in cp	224
328	in csplit	234
329	in ctags	237
330	in ed	292
331	in egrep	302
332	in ex	311, 324
333	in expr	337
334	in find	356
335	in grep	389
336	in lint	438
337	in more	532
338	in mv	540
339	in nl	548
340	in pax	584
341	in pg	597
342	in sed	649
343	in vi	814, 816
344	related to shell patterns	64
345	relational database operator	414
346	remove directories	638
347	remove files	632
348	renice	629
349	requirements	
350	FIPS	8
351	reserved words	26
352	return special built-in	77
353	rm	632
	rmel	4, 636
	rmdir	638
	sact	4, 640
	sccs	4, 643
	SCCS commands	
	admin	88
	delta	266
	get	373
	prs	612
	rmel	636
	sact	640
	sccs	643
	unget	758
	val	796
	what	835
	sdb	4
	sed	647
	addresses	649
	editing commands	649
	regular expressions	649
	sequential lists	51
	set special built-in	78
	sh	654
	command history list	658
	command line editing	658
	vi line editing command mode	659
	vi line editing insert mode	659
	vi-mode command line editing	658
	shell command language	19
	alias substitution	24
	appending redirected output	41
	arithmetic expansion	37
	command substitution	36
	compound commands	52
	consequences of shell errors	44
	double-quotes	20
	duplicating an input file descriptor	42
	duplicating an output file descriptor	42
	escape character (backslash)	20
	exit status and errors	44
	exit status for commands	44
	field splitting	38
	function definition command	54
	grammar	56
	here-document	41
	introduction	19
	lists	49
	open file descriptors for reading and writing	43
	parameter expansion	33
	parameters and variables	27
	pathname expansion	39

354	pattern matching notation.....	64	set.....	78
355	patterns matching a single character	64	shift.....	82
356	patterns matching multiple characters	65	times.....	83
357	patterns used for filename expansion	66	trap.....	84
358	pipelines.....	49	unset.....	86
359	positional parameters.....	27	special parameters.....	27
360	quote removal.....	39	spell.....	4, 676
361	quoting.....	20	split.....	679
362	redirecting input.....	40	split files	
363	redirecting output.....	41	csplit.....	234
364	redirection.....	40	split.....	679
365	reserved words.....	26	strings.....	682
366	shell commands.....	45	strip.....	4, 685
367	shell execution environment.....	63	stty.....	687
368	shell grammar lexical conventions	56	combination modes	693
369	shell grammar rules.....	56	control modes.....	687
370	shell variables.....	29	input modes.....	688
371	signals and error handling.....	62	local modes.....	691
372	simple commands.....	45	output modes.....	690
373	single-quotes.....	20	special control character assignments	692
374	special built-in utilities.....	67	sum.....	4, 696
375	special parameters.....	27	system configuration values	380
376	tilde expansion.....	32	system name.....	750
377	token recognition.....	23	tabs.....	698
378	word expansions.....	31	tag file creation.....	237
379	shell commands.....	45	tail.....	701
380	shell execution environment.....	63	talk.....	704
381	shell grammar.....	56	tar.....	4, 707
382	shell grammar lexical conventions	56	tar format	
383	shell grammar rules.....	56	in pax.....	590
384	shell introduction.....	19	tee.....	711
385	shell variables.....	29	terminal characteristics	
386	shift special built-in.....	82	stty.....	687
387	should.....	6	tabs.....	698
388	signal processes.....	418	tput.....	726
389	signals and error handling.....	62	tty.....	738
390	simple commands.....	45	terminate processes.....	418
391	single-quotes.....	20	terminology.....	6
392	sleep.....	668	test.....	713
393	sort.....	670	tilde expansion.....	32
394	special built-in utilities.....	67	time.....	719
395	break.....	68, 70	times special built-in.....	83
396	characteristics.....	67	token recognition.....	23
397	colon.....	69	touch.....	722
398	dot.....	71	tput.....	726
399	eval.....	72	tr.....	729
400	exec.....	73	trap special built-in	84
401	exit.....	74	true.....	734
402	export.....	75	tsort.....	736
403	readonly.....	76	tty.....	738
404	return.....	77	type.....	740

Index

405	ulimit.....	742	move back.....	812-813, 817-818
406	umask.....	744	move cursor.....	807, 809-810, 824
407	UN.....	9	move down in column.....	807
408	unalias.....	748	move forward.....	813
409	uname.....	750	move forward with tabs.....	808
410	uncompress.....	753	move to bigword.....	819, 825
411	undefined.....	6	move to bottom of screen.....	821
412	unexpand.....	755	move to first character in line.....	814
413	unset.....	4, 758	move to first non-blank.....	812, 814
414	uniq.....	761	move to line.....	820
415	unlink.....	765	move to matching character.....	810
416	unpack.....	4, 767	move to middle of screen.....	821
417	unset special built-in.....	86	move to next section.....	812
418	unspecified.....	6	move to specific column.....	813
419	until loop.....	54	move to top of screen.....	820
420	user identity		move to word.....	819, 825
421	id.....	400	move up in column.....	807
422	logname.....	458	page backwards.....	806
423	newgrp.....	542	page forward.....	806
424	who.....	838	put from buffer.....	822
425	utility option parsing.....	385	redraw screen.....	808
426	uucp.....	770	redraw window.....	826
427	uudecode.....	774	regular expression.....	816
428	uuencode.....	776	reindent.....	817
429	uulog.....	4, 779	repeat.....	814
430	uuname.....	4, 781	repeat find.....	815, 821-822
431	uupick.....	4, 783	repeat substitution.....	811
432	uustat.....	786	replace character.....	823
433	uuto.....	4, 789	replace text with command.....	810
434	uux.....	792	return to previous context.....	811
435	val.....	4, 796	return to previous section.....	812
436	vi.....	799	reverse case.....	816
437	append.....	817	reverse find character.....	813
438	change.....	818	scroll backward.....	808
439	clear and redisplay.....	807	scroll backward by line.....	809
440	command descriptions.....	802	scroll forward.....	806
441	delete.....	818	scroll forward by line.....	806
442	delete character.....	825-826	shift left.....	815
443	delete word.....	808	shift right.....	816
444	display information.....	806	substitute character.....	823
445	enter ex mode.....	823	substitute lines.....	824
446	escape next character.....	808	terminate command or input mode.....	809
447	execute.....	816	undo.....	824
448	execute an ex command.....	815	undo current line.....	825
449	exit.....	827	yank.....	826
450	find character.....	819-820	yank current line.....	826
451	find regular expression.....	814	wait.....	828
452	insert.....	820	warning	
453	insert empty line.....	822	OB.....	9
454	join.....	821	OF.....	9
455	mark position.....	821	OP.....	9

456	PI.....	9
457	UN.....	9
458	wc.....	832
459	what.....	4, 835
460	while loop.....	54
461	who.....	838
462	will.....	6
463	word counting.....	832
464	word expansions.....	31
465	write.....	842
466	xargs.....	845
467	yacc.....	4, 850
468	algorithms.....	862
469	code file.....	852
470	completing the program.....	861
471	conflicts.....	859
472	debugging the parser.....	861
473	declarations section.....	853
474	description file.....	852
475	error handling.....	859
476	grammar rules.....	855
477	header file.....	852
478	input grammar.....	857
479	input language.....	853
480	interface to the lexical analyser.....	860
481	lexical structure of the grammar.....	853
482	library.....	861
483	limits.....	862
484	programs section.....	856
485	zcat.....	865