
Index

./2, 81
 //, 42
 1e-n, 261
 ::/2, 164, 186, 189
 ;/2, 62
 </2, 47
 =./2, 82
 =/2, 18
 :=/2, 47
 =</2, 47
 ==/2, 78
 =>/2, 160
 >/2, 47
 >=/2, 47
 ‘, ’/2, 60
 ->/2, 62
 \=/2, 47
 \==/2, 78
 #</2, 166
 #=/2, 166
 #=</2, 166
 #>/2, 166
 #>=/2, 166
 #\=/2, 166
 \$</2, 162
 \$=/2, 162
 \$=</2, 162
 \$>/2, 162
 \$>=/2, 162
 \$\=/2, 162
 &=/2, 186
 &\=/, 186
 !/0, 65
 abs/1, 42
 alldifferent/1, 196, 241
 and/2, 160
 append/3, 24
 arg/3, 81
 atom/1, 77
 atomic/1, 77
 bb_min/3, 248
 delta option, 248
 factor option, 248
 strategy:continue option, 251
 strategy:dichotomic option, 251
 strategy:restart option, 251
 char_code/2, 116
 clause/2, 69
 compound/1, 77
 count/3, 111
 decval/1, 146
 delete/5, 217
 dim/2, 121
 div/2, 42
 dynamic, 70
 eplex_cleanup/0, 288
 eplex_get/2, 281
 eplex_solve/1, 280
 eplex_solver_setup/1, 280
 eplex_solver_setup/4, 287
 eplex_var_get/3, 281
 eplex_var_get.bounds/3, 286
 eval/1, 174
 exclude/2, 199
 fail/0, 65
 fix/1, 128
 flatten/2, 241
 for/3, 115
 foreach/2, 111
 foreacharg/2, 120
 foreachelem/2, 122, 123
 fromto/4, 124
 functor/3, 80
 fx, 55
 fxx, 54
 fxy, 54
 fy, 55
 get_domain_as_list/2, 208
 get_max/2, 206
 get_min/2, 206
 getval/2, 146
 ground/1, 77
 halt/0, 17
 incval/1, 146
 indomain/1, 209
 indomain/2, 219

- inf/0, 264
- integer/1, 75
- integers/1, 165
- is/2, 43, 122
- is.dynamic/1, 158
- labeling/1, 212
- length/1, 46
- length/2, 44
- locate/2, 265
- maxlist/2, 255
- member/2, 67
- minimize/2, 230
- mod/2, 42
- multifor/3, 119
- neg/1, 160
- nonvar/1, 77
- not/1, 64
- number/1, 49, 77
- once/1, 65
- or/2, 160
- pi/0, 258
- reals/1, 165
- rem/2, 42
- round/1, 128
- search/6, 223
- set_threshold/1, 262
- setval/2, 146
- sqrt/1, 128
- squash/3, 198, 268
- subscript/3, 121
- sum/1, 194
- suspend/3, 167
- term.variables/2, 241
- true/0, 70
- var/1, 76
- wake/0, 199
- write/1, 62
- writeln/1, 111
- xf, 55
- xfx, 54
- xfy, 54
- yf, 55
- yfx, 54

- ambivalent syntax, 59
- answer, 12
- arithmetic comparison predicate, 47
- arithmetic constraint, *see* constraint
- arithmetic evaluator, 43
- array, 121
- atom, 5
- atomic goal, 5

- backtracking, 15, 31
- binding order, 43
- Boolean constraint, *see* constraint
- bracketless prefix form, 42

- choice point, 15
- Clark completion, 320
- clause, 5, 284

- Colmerauer, A., ix
- comparison predicate, *see* arithmetic comparison predicate
- conditional solution, 265
- conjunction, 92
- constant, 5
 - numeric, 92
- constrained optimisation problem, *see* COP
- constraint, 90
 - active, 51
 - all.different, 96
 - arithmetic, 93, 161
 - Boolean, 92, 160
 - core, 160
 - disjunctive, 201
 - implied, 105
 - integrality, 282
 - linear, 93
 - passive, 51
 - reified, 166
 - satisfiable, 90
 - solution to, 90
 - solved, 90
 - unsatisfiable, 90
- constraint propagation, 103, 185
- constraint satisfaction problem, *see* CSP
- constraint store, 200
- continuous variable, *see* variable
- COP, 98
- cryptarithmic problem, 95
- CSP, 90
 - consistent, 91
 - failed, 91
 - feasible, 91
 - inconsistent, 91
 - infeasible, 91
 - solution to, 91
 - solved, 91
- cut, 65

- decision variable, *see* variable
- declarative programming, 35
- disjunction, 62, 92

- equivalent CSPs, 91
- expression
 - arithmetic, 43, 93
 - Boolean, 92
 - linear, 92
- fact, 6
- functor, 5, 59

- gae (ground arithmetic expression), 43
- goal, 6

- heuristics
 - value choice, 105
 - variable choice, 104
- implication, 8
- infix form, 42

- interpretation, 90
 - declarative, 9
 - procedural, 9
- iterator, 111
- Kowalski, R. A. K., ix
- labelling, 104
- linear constraint, *see* constraint
- list, 21
 - empty, 21
 - head of, 21
 - tail of, 21
- logic program, 4
- Mackworth, A., x
- Martelli, M., 12
- meta-variable, 61
- mgu, 12
- mixed integer programming, 282
- modelling, 94
- Montanari, U., x, 12
- most general unifier, *see* mgu
- negation, 64, 92
- number, 42
- occur check, 19
- operator, 52
 - arithmetic, 42
 - declaration of, 52
- predicate, 5
 - arity of, 5
 - dynamic, 70
 - name of, 5
- prefix form, 42
- procedure, 6
 - definition of, 6
- program, 6
- Prolog, x
- propagation threshold, 262
- propositional satisfiability problem, 284
- pure Prolog, 4
- pure Prolog program, *see* program
- query, 6
 - atomic, 6
- range declaration, 164
- recursion, 25
- Robinson, J. A., ix
- rule, 6
 - body of, 6
 - head of, 6
- Schimpf, J., 321
- search
 - backtrack-free, 206
 - backtracking, 104
 - branch and bound, 106
 - complete, 105, 133
 - greedy, 139
 - incomplete, 105, 133
 - limited discrepancy, 144
 - shallow backtracking, 208
 - top-down, 103
- search tree, 104
- shaving, 268
- shelf, 149
- statement
 - alternative choice, 30
 - atomic, 30
 - block, 30
- structure, 59
- substitution, 11
- Sutherland, I., x
- term, 5
 - base, 4
 - compound, 5
 - ground, 5
- unification algorithm, 12
- unification problem, 12
- unifier, 11
- variable, 4
 - anonymous, 7
 - Boolean, 92
 - continuous, 101, 256
 - decision, 91
 - local, 33
 - logical, 20
 - non-logical, 146
- variable declaration, 164