## Index

Aan, Peter, 281–284  
Adapting code, 195  
American style options, 227  
Analysis techniques programs, 33–40. See also TradeStation  
Anchor bar, selecting, 212  
AND operator, 43  
Argument list, 70  
Arithmetic expressions, 5  
Arps, Jan, 211  
Arrays, 61  
Back-testing on daily bars, 76, 77  
Balsara, Nauzer J., 171  
Bar charts, 56–58, 204–208  
Barna, Mike, 265–267  
Batch processing, 202  
Binary operators, 4–5  
Bollinger Band calculation, 142  
Bollinger Bandit trading strategy, 131–134, 135  
Book value, 224  
BreakPoint call to invoke Debugger, 178, 180, 182  
Buy easier day, 148–149  
Calculation module of MyRSI system, 35–40  
Camel ratio spreads, 244, 249, 250  
Chahal, Ziad, 268–270  
Chande, Tushar, 95  
Changing conditions and options trading, 229  
Chisholm, Michael, 284–286  
ChoppyMarketIndexFunction, 69–70  
Clayburg, John, 254–256  
Closing options trades, 226–227  
Code  
commenting out, 34, 194  
reusing, 35, 68  
syntax errors in, 176  
verifying, 60  
See also Debugging; Program examples  
Colors for PaintBar studies, 63–64  
Combinational strategies, 240–242  
Commenting out code, 34, 194  
Commitment of Traders Report (CFTC), 191–196  
Commodity Futures Trading Commission (CFTC) Website, 194  
Compiled languages, 1  
Computer languages, 1–2  
Concatenation, 5  
Conditional branching with if-then-else statements, 45–50  
with if-then statements, 41–45  
Combinational strategies, 240–241  
Covered option positions, 232  
Credit spreads, 241  
Curly brackets (\{\}), 34, 194  
Curve-fitting, 84  
Cycles, methods for finding, 145  
Data types, 2–4  
Day of week analysis, 197–199  
Day of week volatility analysis, 199–200  
Day trading, 200. See also Super Combo day trading strategy  
Debugger (EasyLanguage)  
description of, 175  
limitations of, 182, 184  
using, 178–182, 183  
Debugging  
logical and syntax errors, 176  
with Print Statement and Print Log, 176–177, 178, 180–190  
setting up code for, 184–190  
See also Debugger  
Decision processing, information required for, 41
INDEX

Delta, 229–230, 244
Development Environment (TradeStation 9.0), 17–21
Diversification, magic of, 80–81
Donchian channel system, 141
Double bottom pattern, 205–208
Dynamic Break Out II trading strategy, 141–147

EasyLanguage
  case sensitivity of, 38
  Debugger, 175, 178–184
  Editor, 28–31, 38–39
  multidata capabilities of, 208–210
  Options dialog box, 39
  overview of, 1–2
  purpose of, 6, 33

Ehlers, John
  interview with, 273–277
  Rocket Science for Traders, 145

Entry and exit efficiency, 87
Equivalent strategies, 239–240
European style options, 227
Excel and optimization
  version 2010, 108–113
  versions prior to 2010, 99, 102–107
Exercising options, 221–222
Expired options, 221, 222
Exponential moving average, 165–166
Expressions, 4–7

Failed breakout methods, 149
Finite state machines, 207–208
Fitschen, Keith, 256–258
Flexibility
  of functions, 70
  of indicators, 60–61

For loops, 50–52
Formal parameter list, 70

Format Analysis Techniques & Strategies dialog box (TradeStation), 96, 98, 113, 114, 118, 119
Format Report Settings dialog box (TradeStation), 92, 93
Forward contracts, 220
Fox, Dave, 261–262
Function prototyping, 71
Functions
  creating, 68–69
  passing values to, 36
  TradeStation, 68–72

Functions, built-in
  ADX and Average, 74
  barsSinceEntry, 44
  FundValue, 194
  Highest, 75
  marketPosition, 45
  Momentum, 75
  Round, 170
  RSI, 36, 75
  StdDev, 169
  Fuzzy logic, 204

Gamma, 230
Gap Back Filler trading strategy, 173–174
Genetic optimization, 113–117
GeoRussell trading strategy, 171–173
Ghost Trader trading strategy, 165–168
Graphs, scales of, 55–56
Greek parameters, 229–231, 244
Griffith, Wayne, 262–265

Hill, Lundy, 279–281

If-then-else statements, 45–50
If-then statements, 41–45
Indicators
  functions compared to, 70
  overview of, 55–62
  strategies compared to, 72
Individual trade run-up and draw down, 87
Inputs, 4
Intermarket analysis, 208–210
Intraday bars, 147
Intrinsic value, 224

Jackson, J. T., 184

Keltner, Chester, 128
King Keltner trading strategy, 128–131, 132
LeBeau, Charles “Chuck,” 277–279
Listed options, 222–223
Logical errors, 176, 184
Long calls, 233
Long calls with short stock, 235, 236
Long positions, 222–226
Long puts, 236–237
Long puts with long stock, 239
Looping, 50–52
Index

Market makers, 231
Market volatility, measures of, 141–142
Marshall, Steve, 270–273
Mermer, Michael A., 286–288
Microsoft Excel. See Excel and optimization
Mini Russell, taking advantage of gap openings in, 171–174
Modular programming, 35–40, 184
Money Manager trading strategy, 168–171
Moving average of closing prices, 55, 128–129

Naked option positions, 232, 242, 244, 247
Naming variables, 2, 38
Nested if-then statements, 47

Open-range breakout system, 147–148
Open-to-close and open-to-open relationships, 197, 199

Operators
conditional expressions, 42–43
overview of, 4–5
precedence of, 5–7

Optimization (TradeStation)
Excel 2010, 108–113
Excel versions prior to 2010, 99, 102–107
generic, 113–117
overview of, 95–99, 126
Strategy Optimization Report, 99, 100–102, 117
time of day analysis, 201–204
Walk Forward Optimization, 121–125
walk-forward testing, 117–121

Options trading
American and European styles of, 227
basics of, 220–222
changing conditions and, 229
closing trades, 226–227
combinational strategies, 240–242
getting started with, 219–220
greek parameters, 229–231, 244
listed options, 222–223
long and short positions, 223–226
market makers, 231
nomenclature and terminology, 223
real-life strategies and trades, 242–250
single-option strategies, 232–240
special properties of options, 227–229
volatility trading, 229

Orders, placing, 73
OR operator, 43
Out of the money, 221, 224

Output
Print Log, 178
Table Creator, 184–190

PaintBar study, 62–66
Parameters
greeks, 229–231, 244
reference-type, 71–72
simple and series, 70–71
See also Optimization
Passing values to functions, 36
Pattern recognition, 204–208
Percent Change chart feature (TradeStation), 212–217
Performance
of group of stocks or commodities, tracking, 211–217
of options, 227–229
Performance Graphs tab (TradeStation), 92, 93
Performance Report window (TradeStation), 87–90
Pivot points, 205–208
PlotPaintBar statement, 63–64, 66
Portfolio analysis, 79–80
PowerEditor (TradeStation 2000i), 8–10
Precedence of operators, 5–7
Print Log and Print Statement, debugging with, 176–177, 178, 189–190
Profit target stops, 48–49
Program control structures
if-then-else statements, 45–50
if-then statements, 41–45
repetitive, 50–52
Program examples
Bollinger Bandit, 133
Dynamic Break Out II, 143
Gap Back Filler, 173–174
GeoRussell, 171–173
Ghost System, 166
King Keltner, 129
Money Manager, 170
Super Combo day trading strategy, 156–158
Table Creator, 184–185
Thermostat, 138–139
TradeStation 9.0, 21–28
TradeStation 2000i, 10–11
Program headers, 34–35
Programming environments, elements of, 175
Programming indicators, 58–60
Protective stops, 48–49, 149–150
INDEX

Pruitt, George, 141, 163, 171
Pseudocode, 127
Ratio spreads, 244, 248–249
Reference-type parameters, 71–72
Relative Strength Index (RSI) function, 36, 75
Remarks, 1–2
Repetitive control structures, 50–52
Reports
creating, 184–190
Strategy Optimization, 99, 100–102, 117
See also Summary report
Researching trading ideas
Commitment of Traders Report, 191–196
day of week analysis, 197–199
day of week volatility analysis, 199–200
intermarket analysis, 208–210
pattern recognition, 204–208
time of day analysis, 200–204
Reserved words, 1
Reusing code, 35, 68
Rho, 230
RINA Systems, 80
Risk
measuring, 169
trading options, 242–244
Rotating surface charts, 107, 112
RSI (Relative Strength Index) function, 36, 75
Seasonality, 145
Selection process, 211–213
Sell easier day, 148–149
Series parameters, 71
Short covered calls, 233–234
Short covered puts, 237, 238
Short naked calls, 234–235, 236
Short naked puts, 237, 238–239
Short positions, 223–226
Short-term swing mode, 135
ShowMe study, 62, 66–68
Simple parameters, 70–71
Single-option strategies, 232–240
Spread trading, 244, 247–248
Standard deviation, 131–132
Statements
conditional branching, 41–50
description of, 3
PlotPaintBar, 63–64
Print, debugging with, 176–177, 178, 189–190
Straddles, 241, 242
Strategies
Bollinger Bandit, 131–134, 135
Dynamic Break Out II, 141–147
Gap Back Filler, 173–174
GeoRussell, 171–173
Ghost Trader, 165–168
King Keltner, 128–131, 132
Money Manager, 168–171
robustness of, 126
Super Combo day trading strategy, 147–165
Thermostat, 134–141
TradeStation, 72–77
validity of, 79
StrategyBuilder (TradeStation 2000i), 11–16, 22
Strategy Optimization Report (TradeStation), 99, 100–102, 117
Stridsman, Thomas, 95
Strike price, 220
Structured programming, 33–40
Stuckey, Randy, 258–261
Subroutines, 71
Summary report (TradeStation)
account size required and return on account, 84
average trade, 84–85
average winning and losing trade, 85–86
buy and hold return, 87
maximum consecutive winners and losers, 85
maximum intraday draw down, 81, 83–84
number of trades and average number of bars per trade, 85
overview of, 80–81, 82–83
Rina index, 86–87
Sharpe ratio, 86
total net profit, 81
trades, 87–90
Super Combo day trading strategy
code, 156–158
daily data bar calculation pseudocode, 152–156
overview of, 147–152
performance, 159, 163, 164
summary, 160–165
trades, 160
Surface charts, three-dimensional, 104, 106, 107, 108, 110–112
Sweeney, John, 90
Switching modes, 135
Syntax errors, 176
Index

Table Creator, 184–190
Technical analysis, elements of, 211
Thermostat trading strategy, 134–141
Theta, 230, 244
Three-dimensional surface or contour charts, 104, 106, 107, 108, 110–112
Tick data, 152
Time frames, use of multiple, 150–152
Time of day analysis, 200–204
Time value, 225
Tolan, John, 270–273
Total efficiency, 87, 90
Tracking relative performance, 211–217
Trade Analysis tab (TradeStation), 90–92
TradeStation
evolution of, 79
functions, 68–72
graphs, 92–95
indicators, 55–62
PaintBar and ShowMe studies, 62–68
Percent Change chart feature, 212–217
as research tool, 191
strategies, 72–77
summary report, 80–90
Trade Analysis tab, 90–92
uses of, 72
versions of, 7–8
See also Optimization
TradeStation 9.0
Development Environment, 17–21
EasyLanguage Editor, 28–31, 38–39
simple program example, 21–28
TradeStation 2000i
PowerEditor, 8–10
simple program example, 10–11
StrategyBuilder, 11–16, 22
Trading at parity, 226
Trading Solutions Website, 115
Trading strategies. See Strategies
Trailing stops, problems with, 76, 77
Translated languages, 1
Trend-following mode, 132
Trend-following systems, 144–145
True ranges, 129
Tweaking code, 68
Underlying assets, 220
Underwater Equity Curve (TradeStation), 94
Values, passing to functions, 36
Variables, 2–4, 38
Vega, 230
Verifying code, 60
Volatility trading, 229
Walk Forward Optimization (WFO), 121–125
Walk-forward testing, 112–113, 117–121
Weekend time decay, 249–250
While loops, 52
Wilder, Welles, 251–254
Williams, Larry, 288–294