

Java for Complete Beginners - Contents

GETTING STARTED	4
The Java Virtual Machine	4
The Java Software Development Kit	5
Java – How things work	5
The NetBeans Software	6
Comments	10
Structure of the programme	11
Running the code	12
Running programmes	14
Sharing your programmes with others	16
VARIABLES	18
The Double variable	22
Short and Float	23
Simple arithmetic	24
Operator Precedence	24
STRING VARIABLES	27
Accepting Input from a User	30
Option Panes	33
CONDITIONAL LOGIC	39
IF Statements	39
IF ... ELSE	43
IF ... ELSE IF	44
Nested IF Statements	46
Boolean Values	47
Switch Statements	48
LOOPS	53
For Loops	53
While Loops	59
ARRAYS	61
What is an Array?	61
Arrays and Loops	64
Other things you can do with arrays	65
Arrays and Strings	68
Multi-Dimensional Arrays	70
ArrayLists	72
MORE ON STRINGS	75
Uppercase and Lowercase	76
Comparing Strings	78
indexOf	79
Ends With ... Starts With	82
Substring	82
Equals	89

CharAt	91
Replace	92
Trim	93
METHODS	94
The Structure of a Method	94
Calling your Methods	95
Passing values to your methods	100
Passing more than one value to your methods	104
HOW TO WRITE YOUR OWN CLASSES	107
Field Variables	108
The Class Constructor	111
Accessing Class Values	113
Inheritance	121
JAVA AND ERROR HANDLING	128
Exceptions	128
Stacks and Stack Traces	130
Logical Errors	133
TEXT FILES	137
Read a Text File	137
Writing to a Text File	147
FORMATTED STRINGS	155
JAVA FORMS	160
NetBeans and Java Forms	160
Events	183
The Plus Button	190
The Equals Button	191
The Clear Button	193
Extending the Functionality of your Calculator	194
MORE FORM CONTROLS	200
The JComboBox Control	201
Check Boxes	206
Radio Buttons	210
Java Menus	214
The Open File Dialogue Box – File Chooser	218
Opening Files with the Open File Dialogue Box	224
The Save File Dialogue Box	226
DATABASES	229
Creating a Database with Java DB	230
Adding Records to the Database Table	236
SQL Commands	240
WHERE Clause	241
Connecting to a Database using Java code	243
Connecting to the Database	243
Connecting to a Database Table	248

ResultSets	249
Using a ResultSet	250

DATABASES AND JAVA FORMS **254**

Database Scrolling Buttons	259
Move Backward through the Database	263
Moving to the First and Last Records	264
Updating a Record	265
Adding a New Record	268
Saving a New Record	275
Deleting a Record	278