# TABLE OF CONTENTS

Dedication v  
Preface xi  
Acknowledgement xiii

Chapter 1: Introduction to Java 15  
- Zeeshan Bhatti  
- Asadullah Shah

Chapter 2: Compiling and Executing Java Code 21  
- Zeeshan Bhatti  
- Asadullah Shah

Chapter 3: Introduction to Data Types in Java 27  
- Zeeshan Bhatti  
- Asadullah Shah

Chapter 4: Arithmetic and Relational Operators 33  
- Zeeshan Bhatti  
- Asadullah Shah

Chapter 5: Relational and Logical Operators 39  
- Zeeshan Bhatti  
- Asadullah Shah

Chapter 6: Bitwise Operators and Type Casting 45  
- Asadullah Shaikh  
- Zeeshan Bhatti  
- Asadullah Shah

Chapter 7: Conditional Statements 51  
- Asadullah Shaikh  
- Zeeshan Bhatti  
- Asadullah Shah

Chapter 8: If-Else Statements 55  
- Asadullah Shaikh  
- Zeeshan Bhatti  
- Asadullah Shah

Chapter 9: The If-Else-If Statements 61  
- Asadullah Shaikh  
- Zeeshan Bhatti  
- Asadullah Shah
Chapter 10: Switch Statement
- Asadullah Shaikh
- Zeeshan Bhatti
- Asadullah Shah

Chapter 11: Loops
- Agha Javed Phatan
- Zeeshan Bhatti
- Asadullah Shah

Chapter 12: Do-While Loops
- Agha Javed Phatan
- Zeeshan Bhatti
- Asadullah Shah

Chapter 13: For Loops
- Agha Javed Phatan
- Zeeshan Bhatti
- Asadullah Shah

Chapter 14: Loop Pitfalls and Exercise
- Agha Javed Phatan
- Zeeshan Bhatti
- Asadullah Shah

Chapter 15: Nested Loops
- Agha Javed Phatan
- Zeeshan Bhatti
- Asadullah Shah

Chapter 16: Arrays in Java
- Waseem Javaid Soomro
- Zeeshan Bhatti
- Asadullah Shah

Chapter 17: Two Dimensional Arrays
- Waseem Javaid Soomro
- Zeeshan Bhatti
- Asadullah Shah

Chapter 18: Strings
- Waseem Javaid Soomro
- Zeeshan Bhatti
- Asadullah Shah
<table>
<thead>
<tr>
<th>Chapter</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chapter 19: Methods of String Class</td>
<td>127</td>
</tr>
<tr>
<td>- Waseem Javaid Soomro</td>
<td></td>
</tr>
<tr>
<td>- Zeeshan Bhatti</td>
<td></td>
</tr>
<tr>
<td>- Asadullah Shah</td>
<td></td>
</tr>
<tr>
<td>Chapter 20: Object and Classes</td>
<td>135</td>
</tr>
<tr>
<td>- Waseem Javaid Soomro</td>
<td></td>
</tr>
<tr>
<td>- Zeeshan Bhatti</td>
<td></td>
</tr>
<tr>
<td>- Asadullah Shah</td>
<td></td>
</tr>
<tr>
<td>Chapter 21: Constructors</td>
<td>141</td>
</tr>
<tr>
<td>- Dil Nawaz Hakro</td>
<td></td>
</tr>
<tr>
<td>- Zeeshan Bhatti</td>
<td></td>
</tr>
<tr>
<td>- Asadullah Shah</td>
<td></td>
</tr>
<tr>
<td>Chapter 22: User defined Methods</td>
<td>147</td>
</tr>
<tr>
<td>- Dil Nawaz Hakro</td>
<td></td>
</tr>
<tr>
<td>- Zeeshan Bhatti</td>
<td></td>
</tr>
<tr>
<td>- Asadullah Shah</td>
<td></td>
</tr>
<tr>
<td>Chapter 23: Arguments Passing</td>
<td>155</td>
</tr>
<tr>
<td>- Dil Nawaz Hakro</td>
<td></td>
</tr>
<tr>
<td>- Zeeshan Bhatti</td>
<td></td>
</tr>
<tr>
<td>- Asadullah Shah</td>
<td></td>
</tr>
<tr>
<td>Chapter 24: Return Statement</td>
<td>163</td>
</tr>
<tr>
<td>- Dil Nawaz Hakro</td>
<td></td>
</tr>
<tr>
<td>- Zeeshan Bhatti</td>
<td></td>
</tr>
<tr>
<td>- Asadullah Shah</td>
<td></td>
</tr>
<tr>
<td>Chapter 25: Working with Classes</td>
<td>169</td>
</tr>
<tr>
<td>- Dil Nawaz Hakro</td>
<td></td>
</tr>
<tr>
<td>- Zeeshan Bhatti</td>
<td></td>
</tr>
<tr>
<td>- Asadullah Shah</td>
<td></td>
</tr>
<tr>
<td>Chapter 26: Multiple Classes</td>
<td>177</td>
</tr>
<tr>
<td>- Muniba Shaikh</td>
<td></td>
</tr>
<tr>
<td>- Zeeshan Bhatti</td>
<td></td>
</tr>
<tr>
<td>- Asadullah Shah</td>
<td></td>
</tr>
<tr>
<td>Chapter 27: Method Overloading and Overriding</td>
<td>185</td>
</tr>
<tr>
<td>- Muniba Shaikh</td>
<td></td>
</tr>
<tr>
<td>- Zeeshan Bhatti</td>
<td></td>
</tr>
<tr>
<td>- Asadullah Shah</td>
<td></td>
</tr>
</tbody>
</table>
Chapter 28: Modifiers for class data
- Muniba Shaikh
- Zeeshan Bhatti
- Asadullah Shah

Chapter 29: Inner Classes
- Muniba Shaikh
- Zeeshan Bhatti
- Asadullah Shah

Chapter 30: Comparison between different class types
- Muniba Shaikh
- Zeeshan Bhatti
- Asadullah Shah

Chapter 31: Exception Handling
- Kamran Khawaja
- Zeeshan Bhatti
- Asadullah Shah

Chapter 32: Throw & Throws Keyword
- Kamran Khawaja
- Zeeshan Bhatti
- Asadullah Shah

Chapter 33: Local Block and Static Block
- Kamran Khawaja
- Zeeshan Bhatti
- Asadullah Shah

Chapter 34: Abstract Classes
- Dini Oktarina Dwi
- Zeeshan Bhatti
- Asadullah Shah

Chapter 35: Interfaces
- Dini Oktarina Dwi
- Zeeshan Bhatti
- Asadullah Shah