

# Java Programming Lab Manual

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INTERNATIONAL ISLAMIC UNIVERSITY MALAYSIA

# **JAVA PROGRAMMING LAB MANUAL**

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**Editors**

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## Chapter 4

### Arithmetic and Relational Operators

Zeeshan Bhatti, Asadullah Shah

#### Abstract

In this chapter we will discuss the various arithmetic operators and their order of execution also known as operator precedence. We will elaborate how an algebraic expression is written or converted into an equivalent Java code. The Increment and Decrement operators will also be explained in this chapter along with their Post-fix and Pre-fix operations.

#### 4.1 Arithmetic operators

As of most of the languages Java also has similar arithmetic operators that are used to perform basic mathematical operations such as addition, subtraction and etc. the table 4.1 shows the basic arithmetic and relational operators used in Java programming.

Table 4.1 Java Arithmetic and Relational operators

Operation	Operator	Algebraic Expression	Java code
Addition	+	$f + 4$	<code>f + 4</code>
Subtraction	-	$f - 4$	<code>f - 4</code>
Multiplication	*	$f \times c$ or $f \times c$	<code>f * c</code>
Division	/	$f \div 2$ or $f / 2$	<code>f / 2</code> or <code>f / 2</code>
Modulus	%	$f \text{ mod } s$	<code>f % s</code>
Increment	++	$f = f + 1$	<code>f ++</code>