



C++

Programming Step-by-Step

Asadullah Shah



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C++ PROGRAMMING: STEP BY STEP

Editors

Asadullah Shah



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5. LOGICAL OPERATORS AND SWITCH STATEMENTS

Asadullah Shah and Assadullah Shaikh
Department of Computer Science, Faculty of Information and
Communication Technology, International Islamic University Malaysia,
Malaysia

Abstract

Before talking about logical operators, we need to know what a Boolean data type. A Boolean value is one that can be either true or false. The three basic Boolean operation are “AND”, “OR” and “NOT”. Each operation takes either one or two Boolean inputs, and returns a Boolean output. Most programming language make use of Booleans, usually called “boolean” or “bool”.

5.1 Logical operators

Logical Operators work with Boolean values or results of relational operations. Logical operators are: **AND (&&)**, **OR (||)**, and **NOT (!)**. For each of this operation you can obtain a **truth table**. The table 5.1 shows some of the results of Boolean and relational operators.

Table 5.1: Boolean and logical operators

$T \&\& T = T$	$T \parallel T = T$	$!T = F$
$T \&\& F = F$	$T \parallel F = T$	$!F = T$
$F \&\& T = F$	$F \parallel T = T$	
$F \&\& F = F$	$F \parallel F = F$	