+

[Arithmetic Operators]

Description

**Addition** is one of the four primary arithmetic operations. The operator + (plus) operates on two operands to produce the sum.

Syntax

sum = operand1 + operand2;

Parameters

sum: variable. Allowed data types: int, float, double, byte, short, long.  
operand1: variable or constant. Allowed data types: int, float, double, byte, short, long.  
operand2: variable or constant. Allowed data types: int, float, double, byte, short, long.

Example Code

int a = 5;

int b = 10;

int c = 0;

c = a + b; // the variable 'c' gets a value of 15 after this statement is executed

Notes and Warnings

1. The addition operation can overflow if the result is larger than that which can be stored in the data type (e.g. adding 1 to an integer with the value 32,767 gives -32,768).
2. If one of the numbers (operands) are of the type float or of type double, floating point math will be used for the calculation.
3. If the operands are of float / double data type and the variable that stores the sum is an integer, then only the integral part is stored and the fractional part of the number is lost.

float a = 5.5;

float b = 6.6;

int c = 0;

c = a + b; // the variable 'c' stores a value of 12 only as opposed to the expected sum of 12.1