**C Programming Operators**

**C Arithmetic Operators**

An arithmetic operator performs mathematical operations such as addition, subtraction, multiplication, division etc. on numerical values (constants and variables).

Operator Meaning of Operator

+ addition or unary plus

- subtraction or unary minus

\* multiplication

/ division

% remainder after division (modulo division)

The operators +, - and \* computes addition, subtraction, and multiplication respectively as you might have expected.

The modulo operator % computes the remainder. For example when a=9 is divided by b=4, the remainder is 1. The % operator can only be used with integers.

Example:

*// Working of arithmetic operators*

*#include <stdio.h>*

*int main()*

*{*

*int a = 9,b = 4, c;*

*c = a+b;*

*printf("a+b = %d \n",c);*

*return 0;*

*}*

**C Increment and Decrement Operators**

C programming has two operators increment ++ and decrement -- to change the value of an operand (constant or variable) by 1.

Increment ++ increases the value by 1 whereas decrement -- decreases the value by 1. These two operators are unary operators, meaning they only operate on a single operand.

Example:

*// Working of increment and decrement operators*

*#include <stdio.h>*

*int main()*

*{*

*int a = 10, b = 100;*

*float c = 10.5, d = 100.5;*

*printf("++a = %d \n", ++a);*

*printf("--b = %d \n", --b);*

*printf("++c = %f \n", ++c);*

*printf("--d = %f \n", --d);*

*return 0;*

*}*

For the exercises use the online compiler and debugger <https://www.onlinegdb.com/>.

Select C Language in the upper right corner selection list.

**Exercise 1.** Write a program to add, substract, multiply, subsrtact and unary divide two numbers and print each result.

Change the program to read the two numbers from user input using scanf();

**Exercise 2**. Run the example from Increment and Decrement Operators. Observe the result.

Make your own example for the operators.

Write a program to read a number from user input using scanf() and then increment and decrement it and print the result.