

Increment and Decrement Operators

Talk to a Teacher

<http://spoken-tutorial.org>

National Mission on Education through ICT

<http://sakshat.ac.in>

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Learning Objectives



Learning Objectives

► Increment and Decrement Operators



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- ▶ Increment and Decrement Operators
- ▶ ++



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- ▶ Increment and Decrement Operators
- ▶ ++
 - ▶ eg. `a++` is a postfix increment operator



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- ▶ Increment and Decrement Operators
- ▶ ++
 - ▶ eg. `a++` is a postfix increment operator
 - ▶ `++a` is a prefix increment operator



Learning Objectives

- ▶ **Increment and Decrement Operators**
- ▶ **`++`**
 - ▶ eg. `a++` is a postfix increment operator
 - ▶ `++a` is a prefix increment operator
- ▶ **`--`**



Learning Objectives

- ▶ Increment and Decrement Operators

- ▶ ++

- ▶ eg. `a++` is a postfix increment operator
- ▶ `++a` is a prefix increment operator

- ▶ --

- ▶ -- eg. `a--` is a postfix decrement operator



Learning Objectives

► Increment and Decrement Operators

► ++

- eg. `a++` is a postfix increment operator
- `++a` is a prefix increment operator

► --

- -- eg. `a--` is a postfix decrement operator
- `--a` is a prefix decrement operator



Learning Objectives

► Increment and Decrement Operators

► ++

- eg. `a++` is a postfix increment operator
- `++a` is a prefix increment operator

► --

- -- eg. `a--` is a postfix decrement operator
- `--a` is a prefix decrement operator

► Typecasting



System Requirements



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- ▶ Ubuntu 11.10 as the operating system.



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- ▶ gcc and g++ Compiler version 4.6.1 on Ubuntu.



Introduction



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Introduction

- ▶ The `++` operator increases the existing value of the operand by one
- ▶ `a++` and `++a` are equivalent to $a = a + 1$
- ▶ The `--` operator decreases the existing value of the operand by one
- ▶ `a--` and `--a` are equivalent to $a = a - 1$



Typecasting



Typecasting

- ▶ Typecasting is done by enclosing the data type you want within parenthesis



Typecasting

- ▶ Typecasting is done by enclosing the data type you want within parenthesis
- ▶ (float)



Typecasting

- ▶ Typecasting is done by enclosing the data type you want within parenthesis
- ▶ (float)
- ▶ (float)a



Summary

- To use the increment and decrement operators



Summary

- ▶ To use the increment and decrement operators
- ▶ postfix and prefix forms



Summary

- ▶ To use the increment and decrement operators
- ▶ postfix and prefix forms
- ▶ **typecasting**



Assignment

- ▶ Write a program to solve the following expression:



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- ▶ $(a/b) + (c/d)$



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- ▶ Write a program to solve the following expression:
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- ▶ The values of a, b, c and d are taken as input from the user



Assignment

- ▶ Write a program to solve the following expression:
- ▶ $(a/b) + (c/d)$
- ▶ The values of a, b, c and d are taken as input from the user
- ▶ Use typecasting to perform real division



About the Spoken Tutorial Project

- ▶ Watch the video available at http://spoken-tutorial.org/What_is_a_Spoken_Tutorial
- ▶ It summarises the Spoken Tutorial project
- ▶ If you do not have good bandwidth, you can download and watch it



Spoken Tutorial Workshops

The Spoken Tutorial Project Team

- ▶ Conducts workshops using spoken tutorials
- ▶ Gives certificates to those who pass an online test
- ▶ For more details, please write to contact@spoken-tutorial.org



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- ▶ It is supported by the National Mission on Education through ICT, MHRD, Government of India
- ▶ More information on this Mission is available at:

<http://spoken-tutorial.org/NMEICT-Intro>

