

Structures in C and C++

Talk to a Teacher

<http://spoken-tutorial.org>

National Mission on Education through ICT

<http://sakshat.ac.in>

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Learning Objectives



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► A Structure



Learning Objectives

- ▶ **A Structure**
- ▶ Declaration of a structure



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- ▶ **A Structure**
- ▶ **Declaration of a structure**
- ▶ **Through an example**



System Requirements



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- ▶ **Ubuntu OS v. 11.10**



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- ▶ **Ubuntu OS v. 11.10**
- ▶ **gcc and g++ Compiler v. 4.6.1**



Introduction



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- ▶ It is called as compound data-type



Introduction

- ▶ When one or more variables are grouped under one name it is known as structure
- ▶ Structure is used to group different data into one object
- ▶ It is called as compound data-type
- ▶ It is used to group related information together



Syntax



Syntax

► **struct struct_name;**



Syntax

- ▶ **struct struct_name;**
 - ▶ eg. struct employee;



Declaration of structure variable



Declaration of structure variable

► **struct struct_name struct_var;**



Declaration of structure variable

- ▶ **struct struct_name struct_var;**
 - ▶ eg. struct employee addr;



Summary

- ▶ **Structure**
- ▶ **Syntax of a structure**
 - ▶ eg. `struct struct_name;`
- ▶ **To access members of a structure**
 - ▶ eg. `stud.maths = 75;`
- ▶ **To add the structure variables**
 - ▶ eg. `total = stud.eng + stud.maths + stud.science;`



Assignment

- ▶ **Write a program to display records of an employee**
- ▶ **Like name, address, designation, salary**



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>

