

Functions 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



Learning Objectives

- What is a function



Learning Objectives

- ▶ **What is a function**
- ▶ **Syntax of a function**



Learning Objectives

- ▶ **What is a function**
- ▶ **Syntax of a function**
- ▶ **Significance of return statement**



Learning Objectives

- ▶ What is a function
- ▶ Syntax of a function
- ▶ Significance of return statement
- ▶ Through examples



Learning Objectives

- ▶ **What is a function**
- ▶ **Syntax of a function**
- ▶ **Significance of return statement**
- ▶ **Through examples**
- ▶ **Some common errors and their solutions**



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 to Functions



Introduction to Functions

- ▶ A function is a self-contained program executing a specific task



Introduction to Functions

- ▶ **A function is a self-contained program executing a specific task**
- ▶ **Every program consists of one or more functions**



Introduction to Functions

- ▶ A function is a self-contained program executing a specific task
- ▶ Every program consists of one or more functions
- ▶ Once executed the control will be returned back from where it was accessed



Syntax for Function



Syntax for Function

► Syntax



Syntax for Function

- ▶ **Syntax**

- ▶ `ret-type fun-name(parameters)`



Syntax for Function

- ▶ **Syntax**
 - ▶ **ret-type fun-name(parameters)**



Syntax for Function

- ▶ **Syntax**

- ▶ **ret-type fun-name(parameters)**

OR



Syntax for Function

► Syntax

- `ret-type fun-name(parameters)`

OR

- `ret-type fun-name()`



Summary

- ▶ **Function**
- ▶ **Syntax of function**
- ▶ **Function without arguments**
 - ▶ eg. `void add()`
- ▶ **Function with arguments**
 - ▶ eg. `int add(int a, int b)`



Assignment

- ▶ Write a program to calculate the square of a number



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



Acknowledgements

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- ▶ **More information on this Mission is available at:**

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

