

# 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



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- ▶ **What is a function**



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



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



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- ▶ **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



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



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- ▶ **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



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## ► Syntax



# Syntax for Function

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



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# 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](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](mailto:contact@spoken-tutorial.org)



# Acknowledgements

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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>

