

# Strings 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 string**



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- ▶ **What is a string**
- ▶ **Declaration of a string**



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- ▶ **Initialization of a string**



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- ▶ **What is a string**
- ▶ **Declaration of a string**
- ▶ **Initialization of a string**
- ▶ **Examples**



# Learning Objectives

- ▶ **What is a string**
- ▶ **Declaration of a string**
- ▶ **Initialization of a string**
- ▶ **Examples**
- ▶ **Some common errors and their solutions**



# System Requirements





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- ▶ **Ubuntu OS v. 11.04**



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- ▶ **Ubuntu OS v. 11.04**
- ▶ **gcc and g++ Compiler v. 4.6.1**



# Introduction to the strings



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- ▶ **String is a sequence of characters that is treated as a single data item**



# Introduction to the strings

- ▶ String is a sequence of characters that is treated as a single data item
- ▶  $\text{size of string} = \text{length of string} + 1$



# Declaration of the String



# Declaration of the String

## ► Syntax:



# Declaration of the String

- ▶ **Syntax:**

- ▶ `char name_of_string[size];`





# Declaration of the String

- ▶ **Syntax:**

- ▶ **char name\_of\_string[size];**
- ▶ eg. **char names[10];**



# Initialization of String



# Initialization of String

## ► Syntax1:



# Initialization of String

- ▶ **Syntax1:**

- ▶ `char var_name[size] = "string";`



# Initialization of String

## ► Syntax1:

- `char var_name[size] = "string";`
- eg. `char names[10] = "Priya";`



# Initialization of String

- ▶ **Syntax1:**

- ▶ `char var_name[size] = "string";`
- ▶ eg. `char names[10] = "Priya";`

- ▶ **Syntax2:**



# Initialization of String

## ► Syntax1:

- `char var_name[size] = "string";`
- eg. `char names[10] = "Priya";`

## ► Syntax2:

- `char var_name[ ] = {'S', 't', 'r', 'i', 'n', 'g'};`



# Initialization of String

## ► Syntax1:

- `char var_name[size] = "string";`
- eg. `char names[10] = "Priya";`

## ► Syntax2:

- `char var_name[ ] = {'S', 't', 'r', 'i', 'n', 'g'};`
- eg. `char names[10] = {'P', 'r', 'i', 'y', 'a'};`





# Summary

- ▶ **Strings**
- ▶ **Declaration of a string**
  - ▶ eg. `char strname[30];`
- ▶ **Initialization of a string**
  - ▶ eg. `char strname[30] = "Talk To A Teacher";`



# Assignment

- ▶ Write a program to print a string using the 2nd syntax
  - ▶ `char var_name[ ] = {'S', 't', 'r', 'i', 'n', 'g'};`



# 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

- ▶ **Spoken Tutorial Project is a part of the Talk to a Teacher project**
- ▶ **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>

