

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**
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- ▶ **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



Introduction to the strings

- ▶ **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**
- ▶ **size of string = length of string + 1**



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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'};`



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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
- ▶ 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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- ▶ **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>

