

# Recursive function

Talk to a Teacher Project

<http://spoken-tutorial.org>

National Mission on Education through ICT

<http://www.sakshat.ac.in>

FOSSEE & Spoken Tutorial Team  
IIT Bombay

May 26, 2014



# Learning Objectives



# Learning Objectives

- ▶ **What is a Recursive function**



# Learning Objectives

- ▶ **What is a Recursive function**
- ▶ **With the help of some examples**



# Prerequisite



# Prerequisite

- ▶ Knowledge of Shell Scripting



# Prerequisite

- ▶ Knowledge of **Shell Scripting**
- ▶ If not, for relevant tutorials please visit <http://spoken-tutorial.org>



# System Requirements



# System Requirements

- ▶ **Ubuntu Linux 12.04 OS**



# System Requirements

- ▶ **Ubuntu Linux 12.04 OS**
- ▶ **GNU Bash version 4.2**



# System Requirements

- ▶ **Ubuntu Linux 12.04 OS**
- ▶ **GNU Bash version 4.2**
- ▶ **GNU Bash version 4 or above is recommended for practice**



# Recursion



Talk to a Teacher



# Recursion

- ▶ **One which calls itself**

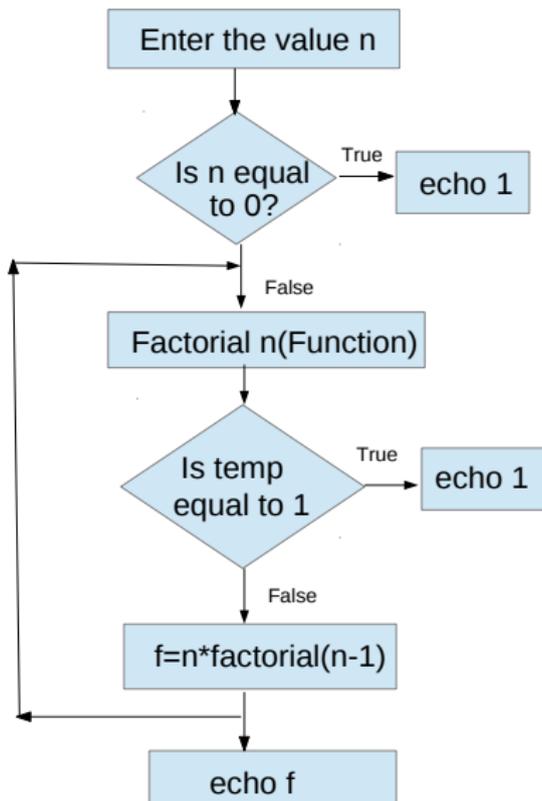


# Recursion

- ▶ **One which calls itself**
- ▶ **Useful technique that simplifies complex algorithms**



# Factorial Of A Number(flowchart)



# Summary



# Summary

- ▶ Recursive **function**
- ▶ **With the help of some examples**



# Assignment

Write a program,

- ▶ Where the recursive function calculates the sum of 'N' numbers



# 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 summarizes the Spoken Tutorial project



# 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 summarizes 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)



# Acknowledgment

- ▶ 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>

