# Inheritance in 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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- **Inheritance**

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- **Inheritance**
- **Types of Inheritance**

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- **Inheritance**
- **Types of Inheritance**
- **We will do this with the help of examples**

# System Requirements

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- **Ubuntu OS v. 11.10**

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- **g++ Compiler v. 4.6.1**

# Introduction to Inheritance

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- **When one object acquires the property of another it is called as inheritance**
- **It is the process of reusing the existing class without modifying them**

# Types of Inheritance

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- **Multilevel inheritance**
- **Hybrid Inheritance**

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- **It is also called as parent class**
- **It has the common qualities that all the objects can inherit**
- **The derived class is the child class**
- **Derived class inherits the properties and functionality of the base class**

# Single inheritance

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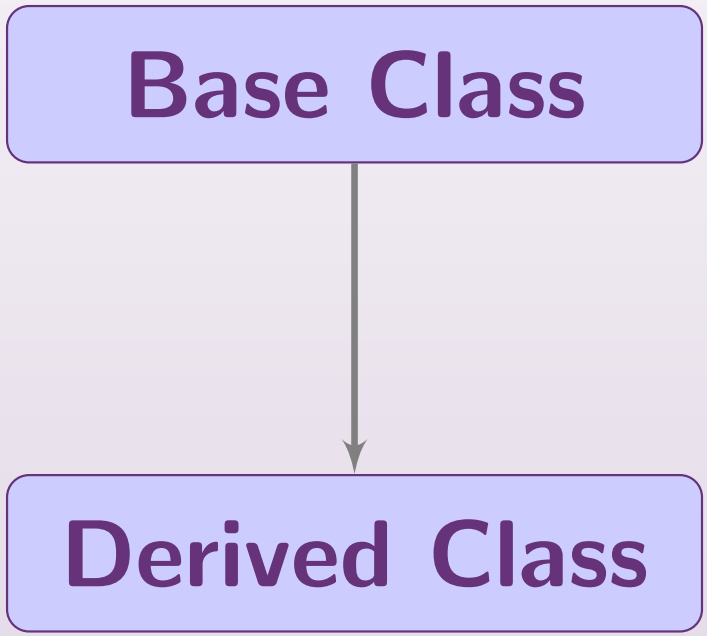
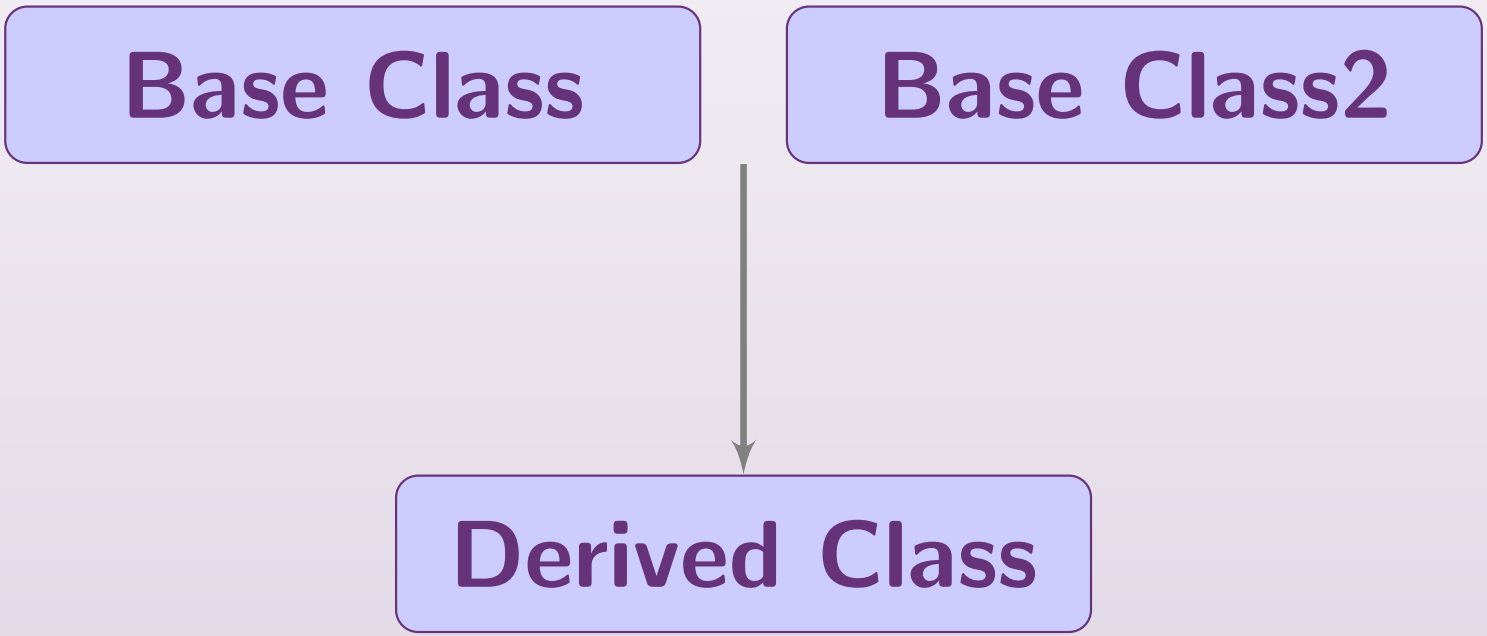
- **In single level inheritance only one base class and one derived class is needed**



# Multiple inheritance

# Multiple inheritance

- **In multiple inheritance derived class inherits from more than one base class**



# Hierarchical inheritance

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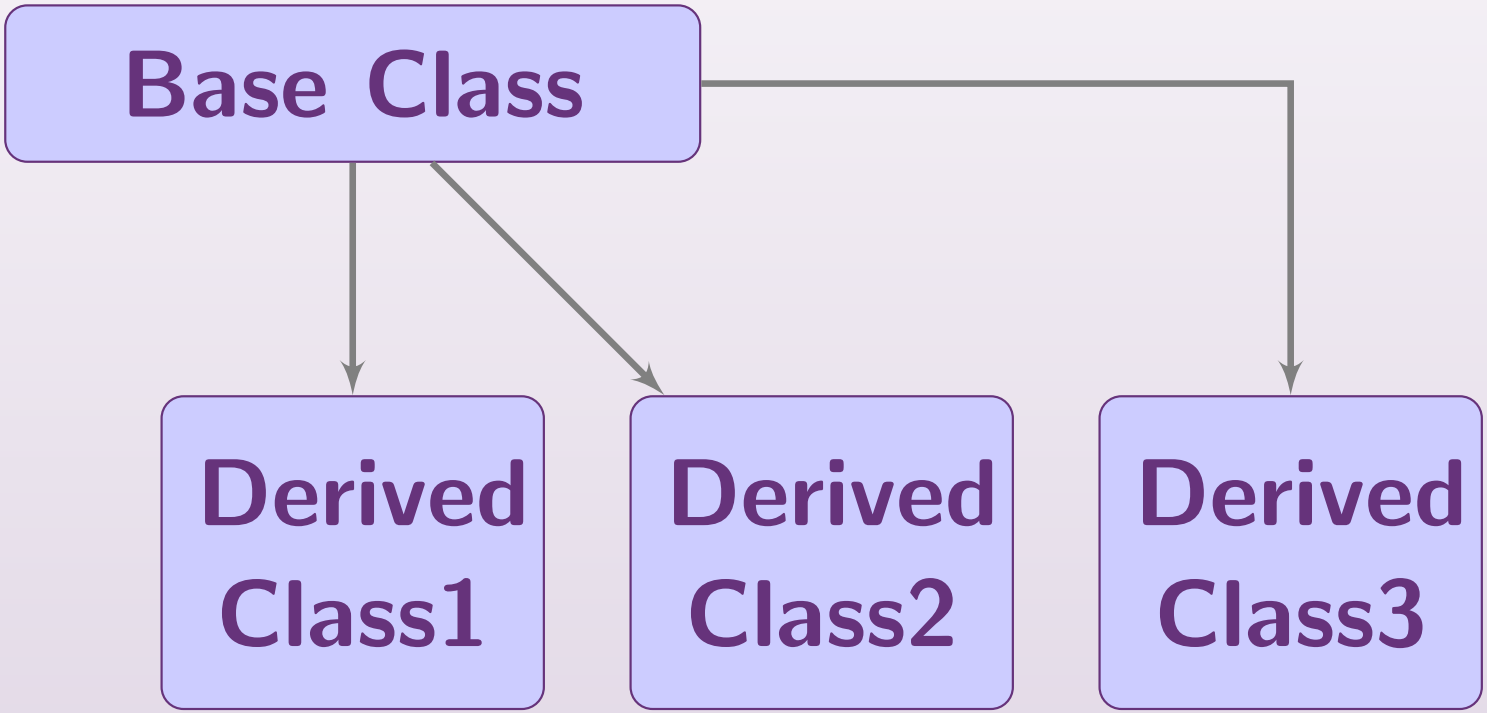
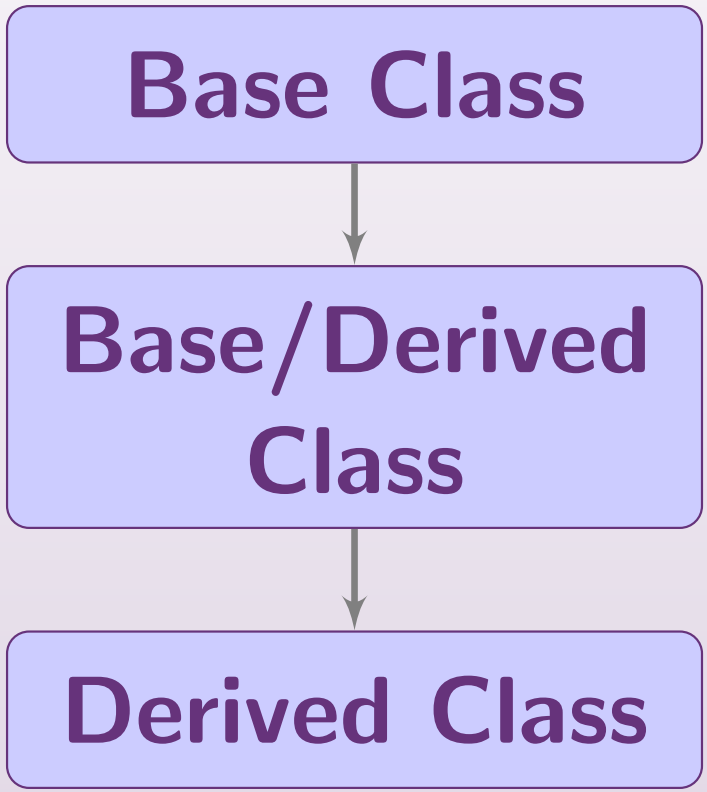
- **In Hierarchical Inheritance multiple derived class inherits from one base**



# Multilevel inheritance

# Multilevel inheritance

- **In Multilevel inheritance the subclass acts as the base class for other classes**



# Hybrid inheritance

# Hybrid inheritance

- **In hybrid inheritance more than one form of inheritance is combined**

# Summary

- **Inheritance**
- **Types of inheritance**

# Assignment

- **Create a class Shape**
- **Create two functions of the class as Area and Perimeter**
- **Find the area and perimeter of various shapes like square, rectangle and circle**

# About the Spoken Tutorial Project

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- **Conducts workshops using spoken tutorials**
- **Gives certificates to those who pass an online test**
- **For more details, please write to**
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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
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