C++

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Topics to be discussed

- Inheritance
  - Inheritance
  - Protected access specifier
  - Access rights
  - Single Inheritance
  - Multiple inheritance
  - Multi-Level Inheritance
  - Constructors and Destructors
  - Passing args to base class constructors

Inheritance

- Inheritance provides the capability to create new class from existing classes which derive properties and characteristics from existing class.
  - Super class: Base class :: existing class
  - Sub class: derived class :: newly created class

- Syntax:
  - Class_name derivedclass : access-specifier baseclass

- Inherits all except:
  - Constructors, destructors and copy constructors of base class
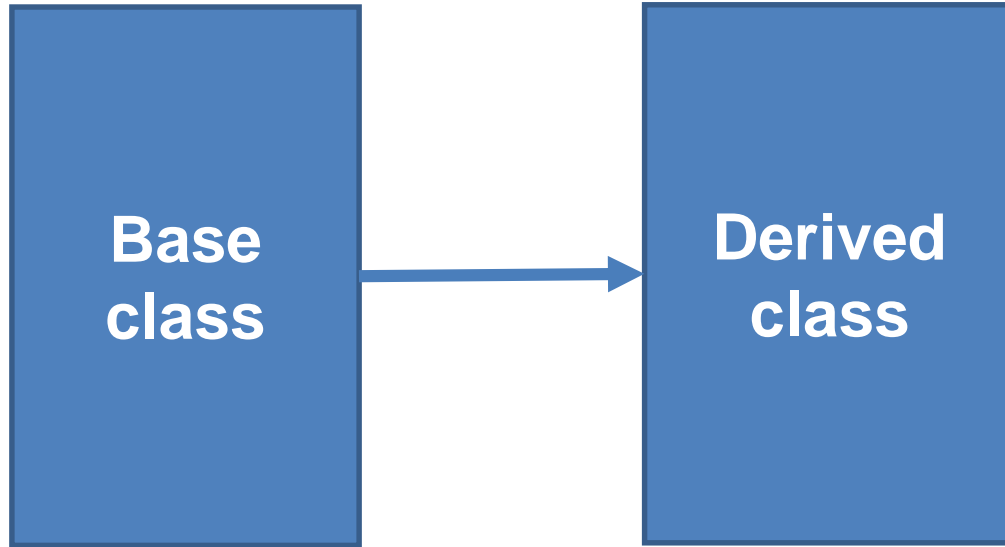 - Overloaded operators & friend functions of base class

Protected access specifier

- Can't be accessed from outside of its class except with the help of friend class

- Protected class members can be accesses by any derived class (sub class) of the base class
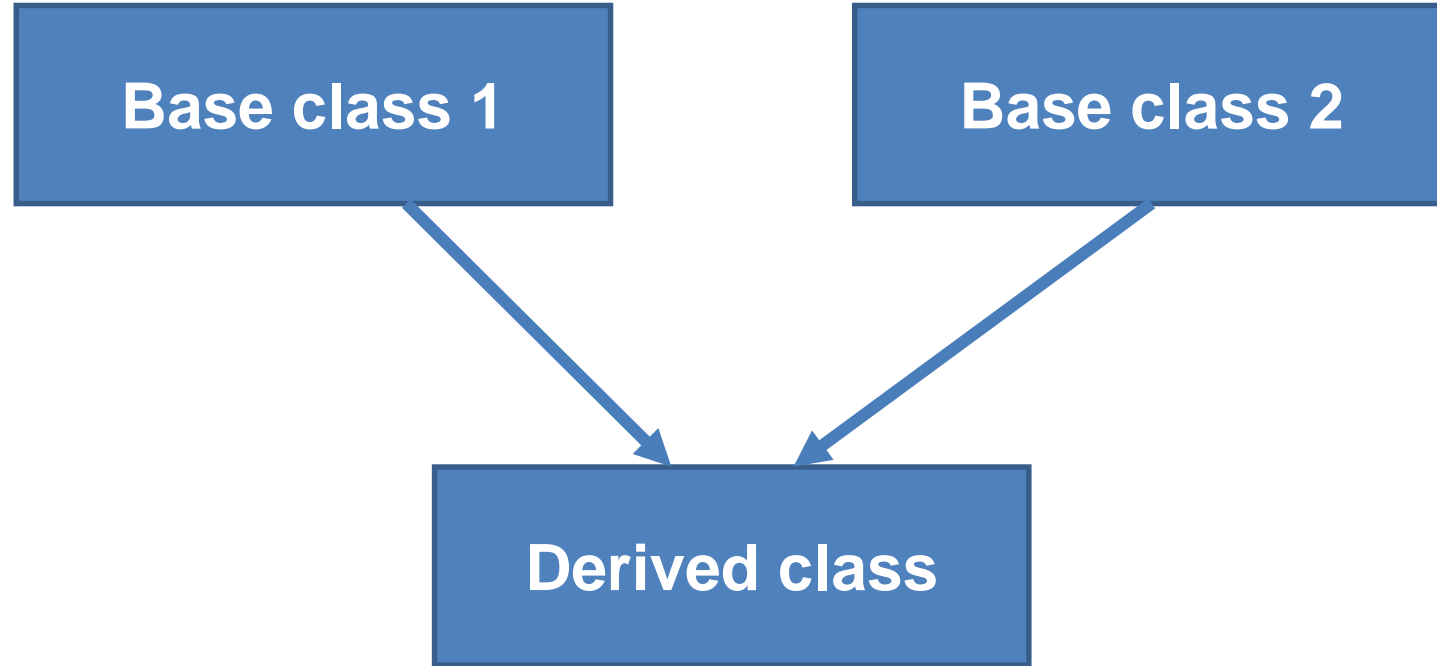
Access rights

- Inheritance

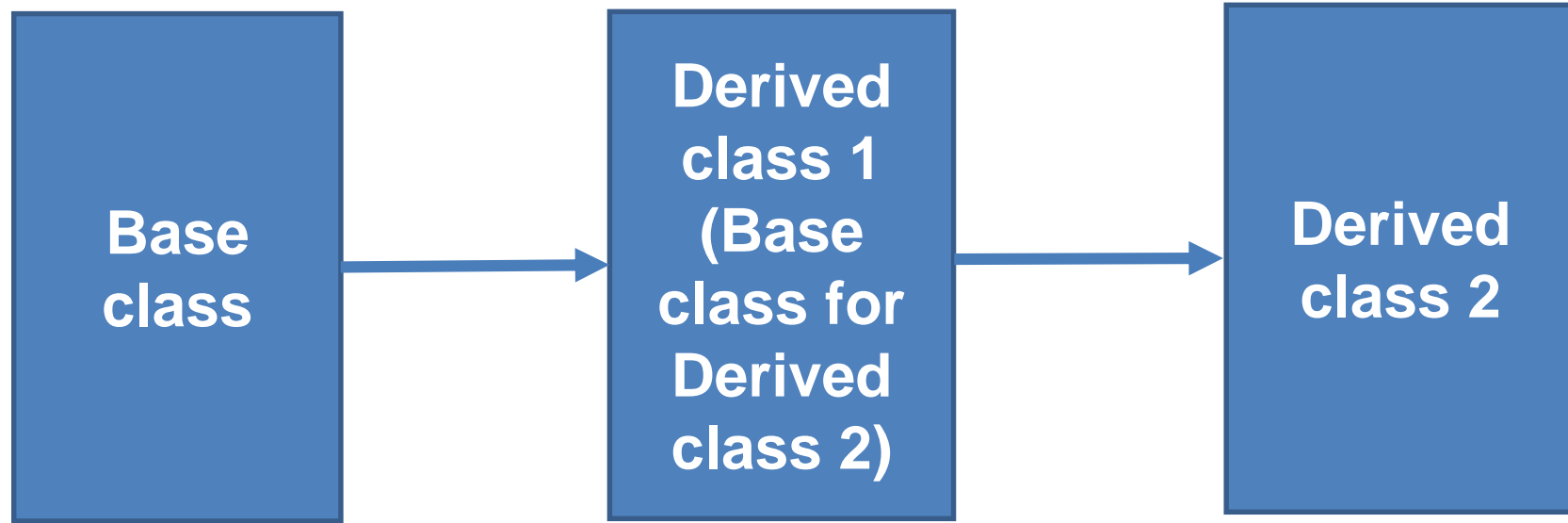| Base class member access specifier	Type of Inheritance		
	Public	Protected	Private
Public	Public	Protected	Private
Protected	Protected	Protected	Private
Private	Not accessible	Not accessible	Not accessible

Single Inheritance

Multiple Inheritance

Multi-Level Inheritance

Constructors & Destructors

- Order of Inheritance for constructors

- Order of Inheritance for destructors

Passing args to base class constructors

- Selection of base class constructors with overloading constructors

Q&A

Thank You