
CAP444

OBJECT ORIENTED PROGRAMMING

USING C++



Created By:
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(SCA), LPU



father



mother

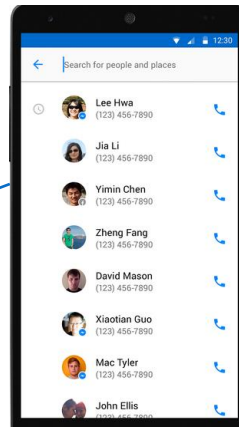


child

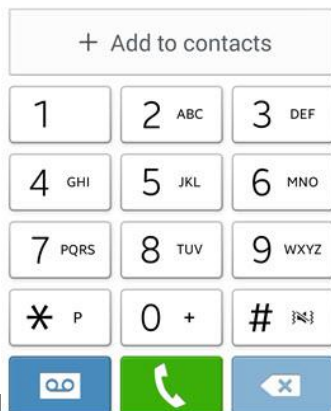


More examples of inheritance:

Contact List



(312) 555-8888



Students

RegistrationNumber	Stream
11601434	CAP - MCA
11604082	CAP - MCA
11616750	CAP - MCA
11907267	CAP - MCA
11908953	CAP - MCA
11909448	CAP - MCA
11909861	CAP - MCA
11910431	CAP - MCA
11910924	CAP - MCA
11911831	CAP - MCA
11814205	CAP - MCA
11915821	CAP - MCA
11915858	CAP - MCA
11916426	CAP - MCA
11900044	CAP - MCA
11901413	CAP - MCA
11901220	CAP - MCA

More examples of inheritance:

Students in Attendance Module

Your section may not appear due to deactivation of attendance module.

Attendance for Day : (MM/DD/YYYY)

Click on column header to sort records

	Type	section	Focus Group	coursecode	Course Name	termid	studentgroup
<input checked="" type="checkbox"/>	Regular	ST112		CAP615	PROGRAMMING IN JAVA	11920W	1
<input type="checkbox"/>	Regular	RM167		CAP680	PROGRAMMING IN JAVA-LABORATORY	11920W	1
<input type="checkbox"/>	Regular	DE801		CAP761	RESEARCH METHODOLOGY	119202	1
<input type="checkbox"/>	Regular	DE801		CAP761	RESEARCH METHODOLOGY	119202	2

Attendance Type : ☒ Lecture ☐ Guest Lecture/Workshop
Period No. :

Show Student List as:

Enter Topics Covered :

CA Components :

Same Students in CA Module

Student Practical Details										
Select	section	Focus Group	coursecode	Course Name	termid	studentgroup	CA Category	Best	Compulsory	Total AT's
<input checked="" type="checkbox"/>	DE847		CAP906	FUNDAMENTALS OF PYTHON	120211	1	A0304	3	0	4
<input type="checkbox"/>	DE847		CAP906	FUNDAMENTALS OF PYTHON	120211	2	A0304	3	0	4
<input type="checkbox"/>	RM167		CAP680	PROGRAMMING IN JAVA-LABORATORY	11920W	1	A0304	3	0	4

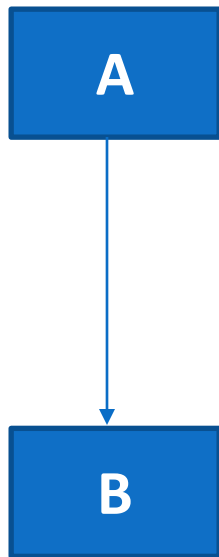
☒ Practical ☐ WTP

Select Practical :-

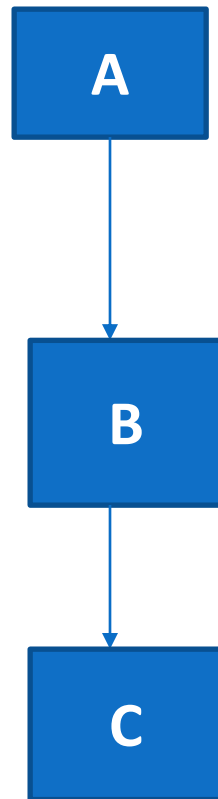
Date of allotment :-

Inheritance: types of inheritance

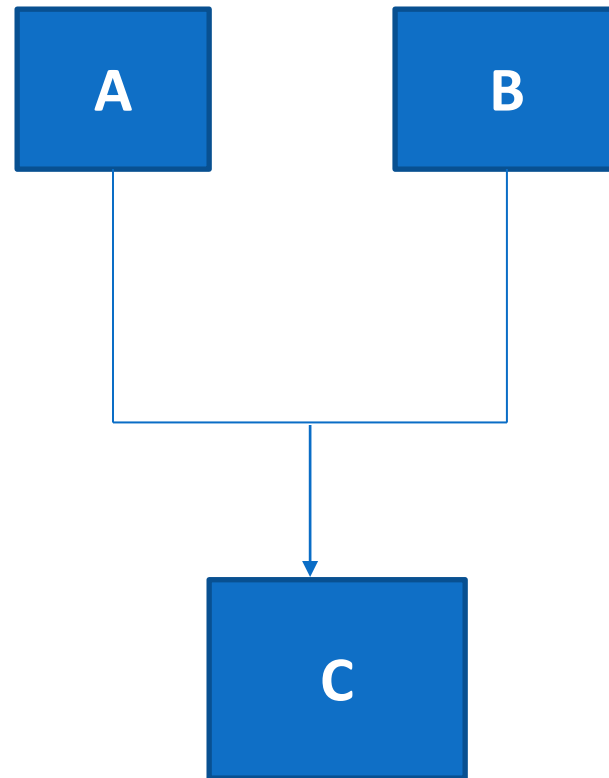
- One class can hire properties from other class
- Advantages: Reusability



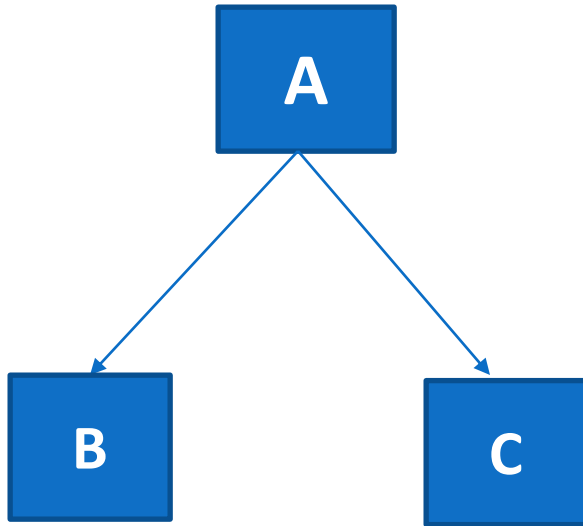
Single



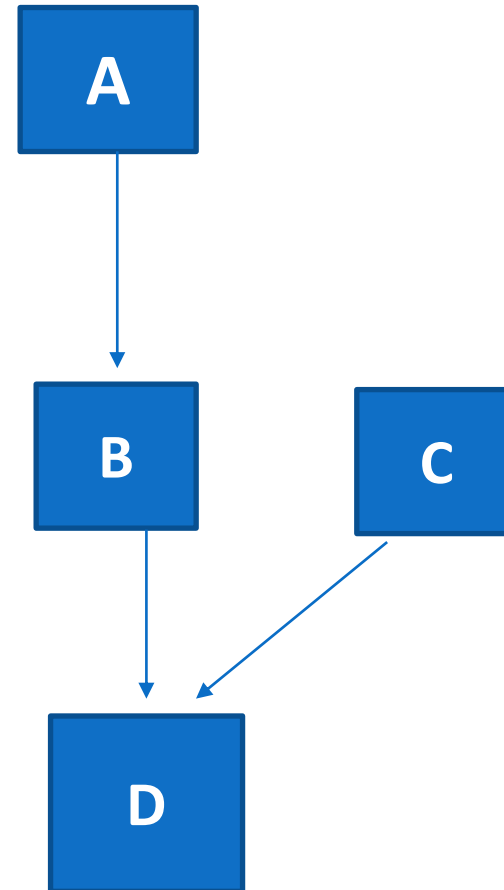
Multilevel



Multiple



Hierarchical Inheritance



Hybrid Inheritance

Which among the following best defines single level inheritance?

- A) A class inheriting a derived class
- B) A class inheriting a base class
- C) A class inheriting a nested class
- D) A class which gets inherited by 2 classes

Single inheritance:

Syntax:

```
class derive_class_name : access_mode  
base_class_name  
{  
    //body of derive_class  
};
```


Multiple Inheritance:

```
class derive_class_name : access_mode  
base_class1, access_mode base_class2, ....  
{  
    //body of derive_class  
};
```

Base class member access specifier	Type of Inheritance		
	Public	Protected	Private
Public	Public	Protected	Private
Protected	Protected	Protected	Private
Private	Not accessible (Hidden)	Not accessible (Hidden)	Not accessible (Hidden)

```

class base_class
{
//base class members (x, y)
};
class derive_class : access_Specifier base_class
{
//base class members (x, y)
//derive class members (a,b)
};

```

Which among the following is correct for a hierarchical inheritance?

- a) Two base classes can be used to be derived into one single class
- b) Two or more classes can be derived into one class
- c) One base class can be derived into other two derived classes or more
- d) One base class can be derived into only 2 classes



Any Query?