

1. C++ program of Hierarchical inheritance

base class student : data members: name, roll_no

member functions : getS(), showS()

derived1 class Personal : data members: ph_no,address

member functions: getP(),showP()

derived2 class Academic: data members : marks, branch

member functions: getA(),showA()

2. C++ program of multiple inheritance

base1 class Personal : data members: name,address

member functions: getP()

base2 class Academic: data members : roll_no, marks

member functions: getA()

derived class student : member functions: display()

3. C++ program of multilevel inheritance

base class shape : data members: radius

member functions: get()

derived1 class circle: data members : ans

member functions: formula()

derived2 class area : member functions: display()

4. Create a C++ program to derive the multilevel inheritance to display the information of student:

base class : student

data members: roll ,

member functions: void getS()

derived class1 : personalInfo

data members: name , address

member functions: void getP()

derived class2 : academicInfo

data members : branch, percentage

member functions: void getA(), void show()

5. C++ example : Hierarchical inheritance

base class maths:

data members: int r,b,h;

member functions:

derived1 class circle:

member funtions : area1()

derived2 class triangle:

member functions: area2()

6. Create a C++ program to derive the single inheritance to display the information of student:

base class : Student

data members: name , address

member functions: void getP(), void showP()

derived class : Data

data members: roll , marks, branch

member functions: void getS(), void showS()

//pure virtual function

base class employee

data members: name , ph_no, salary

member functions : get(), show(), virtual display()

derived class info

data members: id, address

member functions: get1() , display()

Write a C++ program to implement Multiple Inheritance

Base Class1: EvenOdd

data members: num

member function: getN();

Base class2:PosNeg

data members: num1

member function: getN1();

Sub Class: Result

member function: answer1() and answer2()

/*Hierarchical

Class base: Maths

data members :num,base,expo

member function: getF(), getP()

Sub class1: Factorial

data members : fact

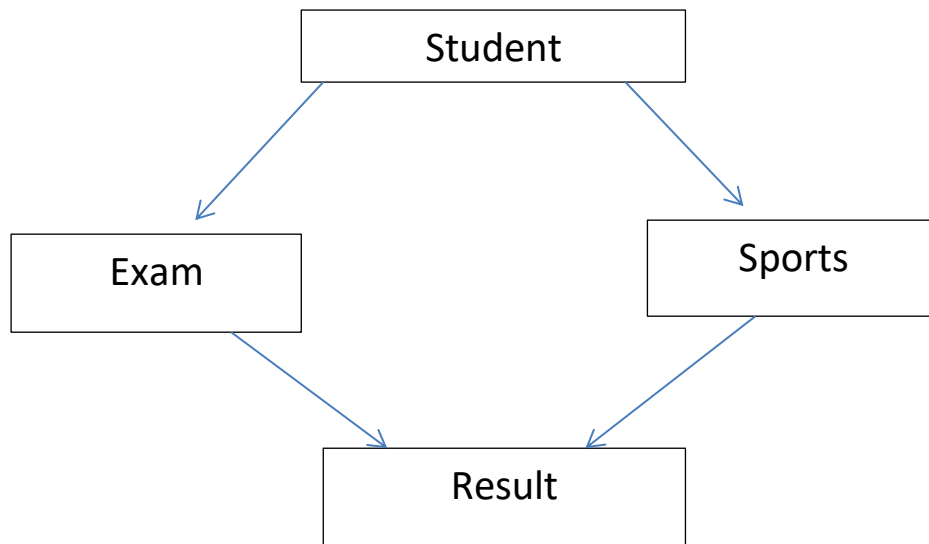
member function: getfact()

Sub class2: Power

data member: power

member function: getpower()

*/



Hybrid Inheritance:

Base class student :

data members: rno, name

member functions: get() put()

sub1 Exam :

data members: s1,s2,s3

member functions: getE() putE()

sub2 Sports :

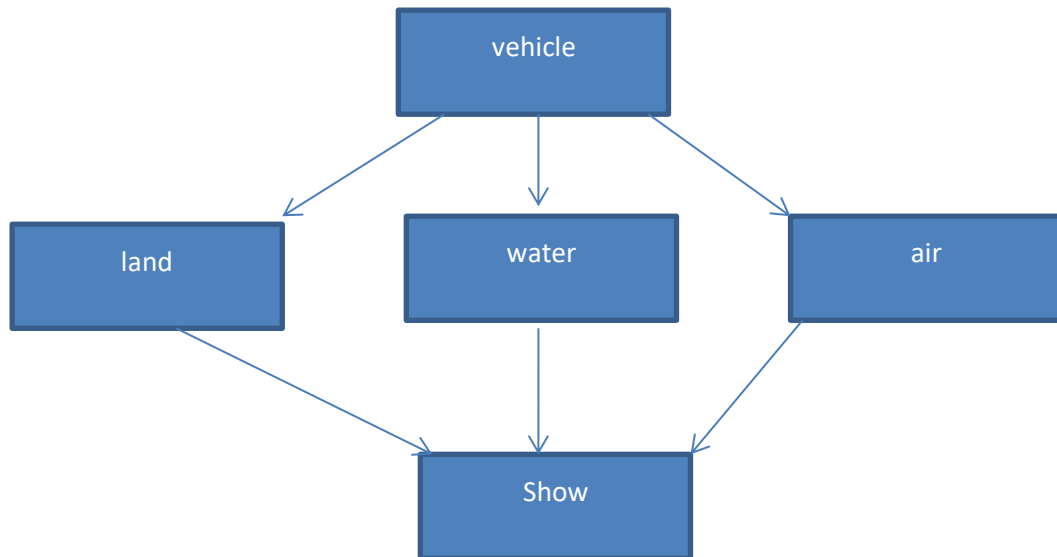
data members: sp

member functions: getSP() putSP()

sub3 Result :

data members: total, per

member function : display()



base class vehicle:

data members: car, bus, ship, boat, aeroplane, helicopter
member function: putL() , putW(), putA()

sub1 class Land:

member function: show1()

sub2 class water :

member function: show2()

sub3 class Air :

member function: show3()

sub4 class show:

member function: display()