**Write a program that illustrate the following relationship and comment the relationships.**

**i) const\_object.non\_const\_mem\_function**

**ii) const\_object.const\_mem\_function**

**iii) non\_const\_object.non\_const\_mem\_function**

**iv) non\_const\_object.const\_mem\_function**

**#include <iostream>**

**#define SUCCESS 0**

**using namespace std;**

**class Class**

**{**

**private:**

**const int id;**

**public:**

**Class(int i):id(i){};**

**int const\_get()const**

**{**

**return id;**

**}**

**int get()**

**{**

**return id;**

**}**

**};**

**int main()**

**{**

**Class a(1);**

**cout <<"non const object calling non const mem func "<< a.get()<<endl; // non const object. non const mem func**

**cout << "non const object calling const mem func "<<a.const\_get()<<endl; // non const object. const mem**

**const Class c(2);**

**cout << "const object calling const mem func "<<c.const\_get(); // const object.cont mem func**

**// cout << c.get(); cannot be called**

**return SUCCESS;**

**}**

**#include<iostream>//i.or**

**using namespace std;**

**class cls1**

**{**

**int a,b;**

**public:**

**cls1(int x, int y)**

**{**

**a=x;**

**b=y;**

**}**

**void show()**

**{**

**cout<<"a="<<a<<"\tb="<<b<<endl;**

**}**

**};**

**int main()**

**{**

**const cls1 o1(3,4),o2(7,9);**

**cout<<"For o1:\t"<<endl;**

**o1.show();**

**cout<<"For o2:\t"<<endl;**

**o2.show();**

**}**

**#include<iostream>//ii.or**

**using namespace std;**

**class cls1**

**{**

**int a,b;**

**public:**

**cls1(int x, int y)**

**{**

**a=x;**

**b=y;**

**}**

**void show() const**

**{**

**cout<<"a="<<a<<"\tb="<<b<<endl;**

**}**

**};**

**int main()**

**{**

**const cls1 o1(3,4),o2(7,9);**

**cout<<"For o1:\t"<<endl;**

**o1.show();**

**cout<<"For o2:\t"<<endl;**

**o2.show();**

**}**

**#include<iostream>//iii.or**

**using namespace std;**

**class cls1**

**{**

**int a,b,sum;**

**public:**

**cls1(int x, int y)**

**{**

**a=x;**

**b=y;**

**sum=0;**

**}**

**void add()**

**{**

**sum=a+b;**

**}**

**void show()**

**{**

**cout<<"Sum = "<<sum<<endl;**

**}**

**};**

**int main()**

**{**

**cls1 o1(3,4);**

**o1.add();**

**o1.show();**

**}**

**#include<iostream>//iv.or**

**using namespace std;**

**class cls1**

**{**

**int a,b,sum;**

**public:**

**cls1(int x, int y)**

**{**

**a=x;**

**b=y;**

**sum=0;**

**}**

**void add() const**

**{**

**sum=a+b;**

**}**

**void show() const**

**{**

**cout<<"Sum = "<<sum<<endl;**

**}**

**};**

**int main()**

**{**

**cls1 o1(3,4);**

**o1.add();**

**o1.show();**

**}**