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();
}
```