第 8 章 C++面向对象程序设计基础习题

阅读程序，写出运行结果，然后上机运行，将机器运行结果与人工运行的结果进行比较，并对每一行输出做出分析。

1.

```cpp
#include <iostream>
using namespace std;
class MyClass {
    public: MyClass();
    MyClass(int xx);
    MyClass(int xx,int yy);
    MyClass(MyClass &);
    void Display();
    void Set(int, int);
    ~ MyClass();
    private:    int x,y;
    };
    MyClass:: MyClass() {
            cout<<"执行无参构造函数：";
             x=0;y=0;
             cout<<"x="<<x<<"y="<<y<<endl; }
    MyClass:: MyClass(int xx) {
        cout<<"执行一个参数构造函数：";
         x=xx;y=0;
         cout<<"x="<<x<<"y="<<y<<endl; }
    MyClass:: MyClass(int xx,int yy) {
        cout<<"执行两个参数构造函数：";
        x=xx;y=yy;
        cout<<"x="<<x<<"y="<<y<<endl; }
    MyClass:: MyClass(MyClass &a) {
        cout<<"执行复制构造函数：";
         x=a.x;y=a.y;
         cout<<"x="<<x<<"y="<<y<<endl; }
    void MyClass:: Display() {
            cout<<"执行显示函数：";
            cout<<"x="<<x<<"y="<<y<<endl; }
    void MyClass:: Set(int xx=0,int yy=0) {
        cout<<"执行设置函数：";
        x=xx;y=yy;
        cout<<"x="<<x<<"y="<<y<<endl; }
        MyClass:: ~MyClass () {
            cout<<"执行析构函数：";
            cout<<"x="<<x<<"y="<<y<<endl; }
    int main() {
```

```cpp
        MyClass    a(12,34);
        a.Set(20);
        a.Display();
        MyClass b(a);
        b.Display();
        MyClass c;
        MyClass d(222);
        { MyClass e(788,453); d.Display();}
        c.Display();
        return 0;
}


2.
#include <iostream>
using namespace std;
class Complex {
    public:    Complex();
    Complex (double x, double y);
    Complex (Complex & c);
    ~ Complex ();
    double GetRel() { return rel;}
    double GetImg() { return img;}
    private:    double rel, img;
    };
    Complex::Complex()
    {    rel=0; img=0;
    cout<<"缺省构造函数被调用: ";
    cout<<"("<<rel<<","<<img<<")"<<endl;
    }
    Complex::Complex(double x, double y)
    {    rel=x; img=y;
    cout<<"构造函数被调用: ("<<rel<<","<<img<<")"<<endl;
    }
    Complex::Complex(Complex & c)
    {    rel = c.rel;
    img = c.img;
    cout<<"复制构造函数被调用: ";
     cout<<"("<<rel<<","<<img<<")"<<endl;
     }
     Complex::~ Complex ()
     {     cout<<"析构函数被调用:    ("<<rel<<","<<img<<")"<<endl; }
     //函数定义
     Complex fun(Complex c) {
         cout<<"在函数  fun()中."<<endl;
```

```cpp
    double x, y;
    x=c.GetRel()*10;
    y=c.GetImg()+100;
    Complex temp(x, y);}
void main() {
    Complex c1(6.8, 98.23),c2;
    c2=fun(c1);
    cout<<"c2=("<<c2.GetRel()<<",";
    cout<<c2.GetImg()<<")"<<endl;
    }
```