```cpp
#include <iostream>
#include <string>

using namespace std;

class X
{
    public:
    string data = "X";
    X(){cout << "X born\n";}
    ~X(){cout << "X died\n";}
    void showData(){cout << data << '\n';}
};
class Y
{
    public:
    char data = 'Y';
    Y(){cout << "Y born\n";}
    ~Y(){cout << "Y died\n";}
    void showData(){cout << data << '\n';}
};

class A
{
    public:
    double data = 777.888;
    Y y;
    A(){cout << "A born\n";}
    ~A(){cout << "A died\n";}
    void showData(){cout << data << '\n';}
};
class B : public A
{
    public:
    int data = 420;
    Y y;
    X *xp; // no object created
    B(){cout << "B born\n";}
    ~B(){cout << "B died\n";}
    void showData(){cout << data << '\n';
         /*A::y.data = char(153);
         cout << A::y.data << '\n';*/}
};
class C : public B
{
    public:
    bool data = false;
    Y y;
    C(){cout << "C born\n";}
    ~C(){cout << "C died\n";}
    void showData(){cout << data << '\n';
         /*cout << A::y.data << '\n';*/}
};

int main()
{
    X *xp; // no object created
    cout << "---------------\n";
    X x; x.showData();
    cout << "---------------\n";
    Y y; y.showData();
    cout << "---------------\n";
    A a; a.showData();
    cout << "---------------\n";
    B b; b.showData();
    cout << "---------------\n";
    C c; c.showData();
    cout << "---------------\n";
    return 0;
}
```