HW2

Sunday, September 12, 2021 1:11 PM

```h
#ifndef DERIVED_H_
#define DERIVED_H_
#include "Base.h"

class Derived : public Base {
public:
   void f2( );
   void f3( );
   virtual void f6( );
private:
   void f1( );
   void f5( );
};
#endif /* DERIVED_H_ */
```

Derived VFT

f2()
f3()
f6()
f1()
f5()
f4()
foo0()
foo1()
foo2()

```cpp
#include <iostream>
#include "Derived.h"

void Derived::f3( ) {
   std::cout << "Derived::f3" << std::endl;
}

void Derived::f5( ) {
   std::cout << "Derived::f5" << std::endl;
}

void Derived::f6( ) {
   std::cout << "Derived::f6" << std::endl;
}

void Derived::f1( ) {
   std::cout << "Derived::f1" << std::endl;
}

void Derived::f2( ) {
   std::cout << "Derived::f2" << std::endl;
}
```

```h
#ifndef BASE_H_
#define BASE_H_
class Base {
public:
   virtual void f3( );
   virtual void f4( );
   virtual void f5( );
   virtual void foo0( );
   virtual void foo1( );
   virtual void foo2( );
private:
   virtual void f0( );
   virtual void f1( );
   virtual void f2( );
};
#endif /* BASE_H_ */
```

Base VFT

F3() ✓
F4() ✓
F5() ✓
Foo0() ✓
Foo1()
Foo2()
F0()
F1()
F2()

```cpp
#include <iostream>
#include "Base.h"
void Base::f3( ) {
   std::cout << "Base::f3" << std::endl;
}

void Base::f4( ) {
   std::cout << "Base::f4" << std::endl;
}

void Base::f5( ) {
   std::cout << "Base::f5" << std::endl;
}

void Base::foo0( ) {
   std::cout << "Base::foo0" << std::endl;
   f0( );
}

void Base::foo1( ) {
   std::cout << "Base::foo1" << std::endl;
   f1( );
}

void Base::foo2( ) {
   std::cout << "Base::foo2" << std::endl;
   f2( );
}

void Base::f0( ) {
   std::cout << "Base::f0" << std::endl;
}

void Base::f1( ) {
   std::cout << "Base::f1" << std::endl;
}

void Base::f2( ) {
   std::cout << "Base::f2" << std::endl;
}
```