Friend Functions and Classes (1A)

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Member Function Call from objects

```
void main(void) {
the main function
 CC C1:
 C1.mem3:
 C1.func3 ();
int foo(CC *X) {
                       C-style functions
 X->mem3:
 X->func3 ();
class DD {
                      member functions
  int faa(CC *Y) {
                      of other classes
     Y->mem3;
     Y->func3 ():
```

```
class CC {
private:
    int mem1;
    int func1();

protected:
    int mem2;
    int func2();

public:
    int mem3;
    int func3();
};
```

Only public members can be accessed

Friend Functions

```
class CC {
private:
    int mem1;
    int func1();
protected:
    int mem2;
    int func2();
public:
    int mem3;
    int func3();
 friend int foo(CC *X);
};
```

Friend Classes

```
class DD {
   int faa(CC *Y) {
        Y->mem1;
        Y->func1 ();

        Y->mem2;
        Y->func2 ();

        Y->mem3;
        Y->func3 ();
    }
};
```

```
class CC {
private:
    int mem1;
    int func1();
protected:
    int mem2;
    int func2();
public:
    int mem3;
    int func3();
 friend class DD;
};
```

Class Structure

Class Structure

References

- [1] W Savitch, "Absolute C++"
- [2] P.S. Wang, "Standard C++ with objected-oriented programming"
- [3] http://www.cplusplus.com