

Although a `Date` object is declared in this program, `class_date.h` is not included here. Because file `class_current_date.h` includes file `class_date.h`, it is not necessary to include it here. Including `class_date.h` twice would not, however, cause any harm because the include guards guarantee that only one inclusion is effective.

Objects of class `Current_date` are usually declared without supplying any arguments to the constructor of the class. This declaration results in that object `date_of_today` contains the date information that is maintained by the operating system of the computer where this program is being executed.

```
// titanic.cpp (c) 2001 Kari Laitinen
#include <iostream.h>
#include "class_current_date.h"

int main()
{
    Date date_when_titanic_sank( "04/15/1912" );

    Current_date date_of_today ;

    int years_ago, months_ago, days_ago ;

    date_of_today.get_distance_to( date_when_titanic_sank,
                                  years_ago,
                                  months_ago,
                                  days_ago ) ;

    cout << "\n Today it is " << date_of_today
         << ".\n On " << date_when_titanic_sank
         << ", the famous ship \"Titanic\" went to"
         << "\n the bottom of Atlantic Ocean."
         << "\n That happened " << years_ago << " years, "
         << months_ago << " months, and "
         << days_ago << " days ago. \n\n" ;
}
```

Because of inheritance, the member functions of class `Date` can be called for `Current_date` objects. Here, for example, functions `get_distance_to()` and `operator<<()` are called for `Current_date` object `date_of_today`.

**titanic.cpp - 1.** A program that uses both a `Date` object and a `Current_date` object.

```
D:\book3cpp>titanic
```

```
Today it is 08/06/2002.
On 04/15/1912, the famous ship "Titanic" went to
the bottom of Atlantic ocean.
That happened 90 years, 3 months, and 21 days ago.
```

**titanic.cpp - X.** Here the program is executed on August 6, 2002.