//The user program that tests the class clockType

#include <iostream>
using namespace std;

#include "clock1.h"

int main()
{
    clockType myClock;
    // Default constructor comes into play

clockType yourClock(3, 30, 0);
    // Constructor with parameters comes into play

    int hour;
    int minute;
    int second;

    //print the time of myClock
    cout << "Line A: myClock: ";
    myClock.printTime();
    cout << endl;

    //print the time of yourClock
    cout << "Line B: yourClock: ";
    yourClock.printTime();
    cout << endl;

    //compare myClock and yourClock using member function equalTime
    if(myClock.equalTime(yourClock))
    {
        cout << "Line C: myClock and yourClock have the same readings";
    }
    else
    {
        cout << "Line C: myClock and yourClock don't have the same readings";
    }
    cout << endl << endl;

    //set the time of myClock
    myClock.setTime(5, 4, 30);

    //set the time of yourClock
    yourClock.setTime(5, 4, 30);

    cout << "Line D: After setting, yourClock: ";
    yourClock.printTime();
    cout << endl;

    //compare myClock and yourClock using non-member function isEqual
    if (isEqual(myClock, yourClock))
    {
        cout << "Line E: myClock and yourClock have the same readings";
    }
    else
    {
        cout << "Line E: myClock and yourClock don't have the same readings";
    }
    cout << endl << endl;

    if (myClock == yourClock)
    {
        cout << "Line E': myClock and yourClock have the same readings";
    }
else cout << "Line E': myClock and yourClock don't have the same readings";
    cout << endl << endl;

cout << "Line F: Enter the hour, minute, and " //Line F
    << "second: ";
cin >> hour >> minute >> second;
cout << endl;

//set the time of myClock using the values entered
myClock.setTime(hour, minute, second);

cout << "Line G: New myClock: "; //Line G
myClock.printTime();    //print the time of myClock
cout << endl;

    //Increment myClock by one second
myClock.incrementSeconds();

cout << "Line H: After incrementing myClock by " //Line H
    << "one second, myClock: ";
myClock.printTime();    //print the time of myClock
cout << endl;

    //retrieve the hour, minute and second of myClock
    //and output the values
    cout << "Line I: hours = " << myClock.getHour()  //Line I
        << ", minutes = " << myClock.getMinute()     
        << ", seconds = " << myClock.getSecond() << endl;

cout << "Line J: " << myClock;    //Line J
    cout << endl << endl;
return 0;
}//end main