- 1. Create a simple class with an overloaded **operator++.** Try calling this operator in both pre- and postfix form and see what kind of compiler warning you get.
- 2. Create a simple class containing an **int** and overload the (binary) **operator**+ as a member function. In other words, adding 2 objects of your class would result in the addition of the 2 corresponding integers. Test your class to show that it works correctly.
- 3. Add a binary **operator-** to Exercise 2 as a member function. Demonstrate that you can use your objects in complex expressions like $\mathbf{a} + \mathbf{b} \mathbf{c}$.
- 4. Add an **operator++** and **operator--** to Exercise 2 (and 3), both the prefix and the postfix versions, such that they return the incremented or decremented object. Make sure that the postfix versions return the correct value.
- 5. Modify the increment and decrement operators in Exercise 4 so that the prefix versions return a non-const reference and the postfix versions return a const object. Show that they work correctly and explain why this should be done in practice.