

Operator Overloading Workshop

- Implement a simple complex number class
 - Default constructor which takes no arguments
 - Constructor which takes arguments
 - Can be copy-initialized and assigned to (you can use compiler defaults if they are appropriate)
- Write a program to test your class

- Add a += operator to your complex number class
- Add a plus operator to your complex number class
- Modify your class so it can print out its real and imaginary parts
- Write a program which creates an instance of the complex number class and exercises all its features

- Implement a simple student class
- Add an equality operator to your student class
- Write a program which creates two (or more) instances of your class. Use the equality operator to compare them
- Experiment with different values
- How do we determine when two student instances are equal?

- Add the inequality operator to your student class
- Alter your program so that it uses the inequality operator to compare two (or more) instances of the student class.
- Experiment with different values

- Add the less-than operator to your student class
- Alter your student program so that it uses the less-than operator to compare the instances
- Create a vector and populate it with student instances, then sort it by calling the vector's sort member function
- Print out the vector before and after sorting it
- Comment out the less-than operator. What happens?