For project 2, you are to implement two classes. The first class is the updated statistician class. Open the previous files (statistician.h and statistician.cpp from the project 1), and add more functions. You should implement the "= operator" in addition to the "+ operator". Assuming `s1`, `s2`, and `s3` are all statisticians, the result of `s1 + s2` should be a new statistician that behaves as if it had all of the numbers of `s1` followed by all of the numbers of `s2`.

The second class is the *bag* class. Download bag1.h and bag1.cpp from Camino lecture section, and you'll need to add two more operations. Implement operators for - and -= for the *bag* class. For two bags x and y, the bag x-y contains all the items of x, with any items from y removed. For example, suppose that x has seven copies of the number 3, and y have two copies of the number 3. The x-y will have fine copies of the number 3 (i.e., 7 – 2 copies of the number 3). In the case where y has more copies of an item than x does, the bag x-y will have no copies of that item. For example, suppose that x has nine copies of the number 8, and y has 10 copies of the number 8. Then x-y will have no 8s. The statement x -= y should have the same effect as the assignment x = x-y;

The code for each of these classes should be divided across two files:

1. A .h file for the interface/class definition.
2. And a .cpp file for the implementation of the class' functions.

In total, you should be submitting four files: **statistician2.h, statistician2.cpp, bag1x.h, and bag1x.cpp**. Further, you should upload these as **separate files** rather than zipping or tarring them together. You **should not** include a main() function in any of these files, but you should write one in a separate .cpp file in order to test the functionality of your classes before submitting your code.