Assignment 1: C++ Features

Due Date: Turn this in before class on Thursday, September 8th.

This assignment has two parts:

1. Converting some of your old work to use the STL and new C++ fetaures.
2. Converting a data structure you wrote to work with uniform initialization and range-based for loops.

Converting Old Work

This part is fairly trivial. Take one or more old C++ assignments (from 240, 245, 350, etc.) and convert them:

- Use uniform initialization syntax
- Use a vector instead of a dynamic array
- Use a range-based for loop instead of an indexed loop.
- Use the auto keyword.

Create a README.txt file; list at least two places in your assignment(s) where you used each of the above features. E.g.:

```
homework2.cpp, line 10: changed array argument to vector for function foo
homework2.cpp, line 20: constructed bar object with {} instead of ()
```

Converting a Data Structure

You wrote a number of data structures, a few in 245 and many more in 350. Pick one. Add additional code to make your data structure work with an initializer list and range-based for loops. I should be able to use your code like this:

```
#include "YourContainer.h"

int main()
{
    YourContainer<int> numbers = {1, 2, 3, 4, 5};

    for (int n: numbers)
        cout << n << endl;
}
```

Obviously, I'll change "YourContainer.h" to the name of your header file. Use google to figure out how this works; it's not in your book. Cite whatever web pages you use in a comment in your code.

Turn it in

Make a folder labeled `Assignment 1` in your turn-in directory and copy in your source files and README.