Workflow

Name:	04.01
Points:	3 pts
Deadline:	03/15
Prerequisite(s):	none

Main

1. Create a header file named **w0401.h** that defines a generic class named *Set* that inherits the interface *SetInterface*. It will represent a set with an infinite capacity, where a set is an unordered collection of distinct objects. The class must contain

   - ☐ a private generic *Node* pointer field named *data*.
   - ☐ its special member functions that should be public and the default value of *data* is null.
   - ☐ a public overridden `Insert()` method. It adds the parameter to the set if the parameter is not already in the set.
   - ☐ a public overridden `Remove()` method. It removes the parameter from the set if the set is not empty and the parameter is in the set.
   - ☐ a public overridden `IsEmpty()` method. It returns true if the set does not have any members; otherwise, it returns false.
   - ☐ a public int constant method named `Size()` that takes no parameters. It returns the size of the set.
   - ☐ a public overridden `Contains()` method. It returns true if the parameter is in the set; otherwise, it returns false.
   - ☐ a public string constant method named `ToString()` that takes no parameters. It returns a string of the elements of the set all enclosed in curly braces with each element separated by a comma.

Test

2. Create a cpp file named **main.cpp** that creates a *Set* object and test each of its methods. The outputs of the methods that are not void must be displayed.