Class money

- money.h
- No changes to public section of class
- size, currency required
Exercise 2

- Your secret folder:
  ```
  ~tiawatts/public_html/cs460f23/Exercise2/abcxyz
  ```
- You can copy this folder to your account and modify it.
- Testing groups
  - Identify issues in your own class
  - Design a testing framework for Exercise 5
  - Not code sharing groups
Exercise 5

- Will be posted around Thanksgiving
- Complete class
- Doxygen website
- `.h` vs `.cpp` documentation
  - `.h` – for the user
  - `.cpp` – for the (modifying) programmer
- Application program
Classes

- Constructors
- Destructors
- Accessors
- Mutators
Class money

private:
// Add attributes private member functions here.

    bool positive;
    unsigned dollars;
    unsigned cents;

    unsigned size;  // required
    unsigned * currency; // required
Classes

- Operator overloading
  - A bit controversial
  - C++ yes – Java no…

- Assignment operator
  - What if you don’t overload it?
  - Dynamic memory issues
Assignment operator for money class

- money & operator = (const money & other);
- Check for self assignment
- Deallocation and reallocation of dynamic memory
- Copy
- Return * this
- What is “this”?
Arithmetic operator overloading
++ and -- operators
<< and >> operators
Project 2
What is Syntactic Analysis?

- Also known as Parsing
- Determining if the order of the tokens generated for the lexemes of the input are in a legal order according to some grammar
- Creation of a parse tree
  - Explicit or implicit
- Error recovery
  - When an error is detected, the parser must get back to a normal state and continue analysis of the input
- Basis for translation
VS Semantic Analysis

- The meaning of the expressions, statements and program units.
- Static semantics
  - At compile time
- Dynamic semantics
  - At run time
- Attribute grammars
- Denotational semantics