Lab 13 Study Questions

1. What is the purpose of an overloaded bracket ([ ]) operator?

2. Given a linked list of integers called L1, write a segment of C++ code that uses an Iterator to walk down the list and print out the values contained in the list.

3. Given a linked list of integers called L1, write a segment of C++ code that uses an index and the bracket operator to walk down the list and print out the values contained in the list.

4. What are the benefits and drawbacks to using the bracket operator?

5. What conditions might result in a Segmentation Fault in the index operator?

6. What conditions might result in a segmentation fault in the Iterator increment (++) , decrement (--) and dereference (*) operators?

7. What is the purpose of a try-throw-catch block?

8. A try may have more that one catch block associated with it. How does the compiler determine which catch it should use?

9. Why is exception handing used in modern programming languages?

10. How does an "lvalue" differ from an "rvalue"?

11. Given the following prototypes for an indexing operator, explain the functional difference between them.

   LT operator [] (const int & index) const;

   and

   LT & operator [] (const int & index) const;

12. Given the following prototypes for an iterator dereferencing operator, explain the functional difference between them.

   LT operator * () const;

   and

   LT & operator * () const;