Object-Oriented Programming (List 6)

Deadline: 19.04.2011

This exercise is about STL.

1. Consider the following main function:

   ```cpp
   int main( int argc, char * argv [ ] )
   {
     std::list< std::string > s;
     s. push_back( "alpha" );
     s. push_back( "beta" );
     s. push_back( "gamma" );
     s. push_back( "delta" );
     // Put a few more.
   }
   ```

2. Write a function void bubblesort( std::list< std::string > & s ). It should use std::list< std::string > :: iterator.

3. Write a function

   ```cpp
   std::ostream& operator << ( std::ostream& stream,
                               const std::list< std::string > & s );
   ```

   Make sure to use const::iterator.

4. Adapt main( ), bubblesort( ) and operator <<, so that they work for std::vector< std::string >. The changes should be very small.

5. Write a function

   ```cpp
   bool contains( const std::string& s,
                   const std::list< std::string > :: const_iterator p1,
                   const std::list< std::string > :: const_iterator p2 );
   ```
Use it to write a function void removerepeated( std::list< std::string > & s ). It should use contains and use erase for deletion.

(See the rules for showing code on the course homepage. Default value of a task (when shown on time) is 3 points.)