The enclosed code sample implements a file comparison utility; and was written in C++11 by Christopher N. Hume. This is a console application based on "*A Fast Algorithm for Computing Longest Common Subsequences*", as described in the [1977 paper by Hunt and Szymanski](http://www.cs.bgu.ac.il/%7Edpaa111/wiki.files/HuntSzymanski.pdf).

Programmers make daily use of similar utilities, such as WinMerge, or of source repositories, such as TFS or SVN, to identify edits made to a file by comparing subsequent file revisions.

The heart of the implementation is in the files LCS.cpp and LCSRecord.cpp, along with the helper class in Pair.cpp. The remaining files wrap the core algorithm into a full-fledged file comparison utility.

The following files have been included:  
  
**Header Files**  
Pair.h  
Delta.h  
LCS.h

LCSRecord.h  
LCSString.h

Command.h  
join.h

**Source Files**  
Pair.cpp  
Delta.cpp  
LCS.cpp  
LCSFormat.cpp

LCSRecord.cpp  
LCSString.cpp

Command.cpp  
main.cpp

A simplified, single module demonstration of the Longest Common Subsequence (LCS) class has also been posted in the [C++ section on Rosetta Code](http://rosettacode.org/wiki/Longest_common_subsequence#C.2B.2B).