

Documentation:

This C++ program efficiently finds the longest and second longest compound words from a list. It reads words from a user-specified file, storing them in a set for fast searches. The core function, `isCompoundWord`, employs recursion to determine if a word is compound (formed by concatenating shorter words in the set). The program iteratively applies this function across all words, tracking the two longest compound words. It also measures and outputs the processing duration. This implementation showcases practical uses of file I/O, set data structures, and recursion in C++, making it an illustrative example for understanding complex word processing tasks.