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This lab worked to create a dictionary of words and compared an input file to that. In order to accomplish this task, an array of linked lists was set up. There was an index for each letter that started the word, and another index to hold the characters. For each word in the input file, the appropriate index in the array was found and all the words in it were checked until the correct word was found. If the word was not in the dictionary, there were three checks that were performed.

The first checked for triple characters. If there were triple characters, one of the characters was removed and we checked if the word existed. The second checked for double letters using the same process as described above. The third process checked if there was a typo after double letters. This had to return values: one where that letter was decreased down to 'a' and another where it was increased to 'z'. If during that process it found that the word existed, it returned the word.

Once all the checks were run, the output checked if the words existed, and displayed the ones that did. A scanner was used to take user input from the display and the appropriate word was printed to the output file.