A screenshot of a computer program

AI-generated content may be incorrect.

Figure . Testing.txt

These are the results of running the program on testing.txt. Both algorithms find “scholl” and “Brodbeck” to be unknown words. Additionally, the binary search algorithm suggests “scholiums” and “brod” as words close to the unknown targets. I based this suggestion off of where a search ended if the target word was not identified in the dictionary. Finally, TST took about a fifth of the time that binary search took. A screenshot of a computer

AI-generated content may be incorrect.

These are the results of running random1000words.txt. No unknown words were found, and TST still took a fraction of the time that binary search took.

Figure . random1000word.txt

A screenshot of a computer

AI-generated content may be incorrect.

Figure . test\_0.txt

This is a third test that I generated in order to better understand how well my idea for suggesting words for misspelled words functions. Obviously, the time difference between the algorithms still holds, and the same unknown words are identified. However, it is clear that basing suggestions on where the search ends is not ideal. “Adventurus” is not close to “adverb” in implied meaning.