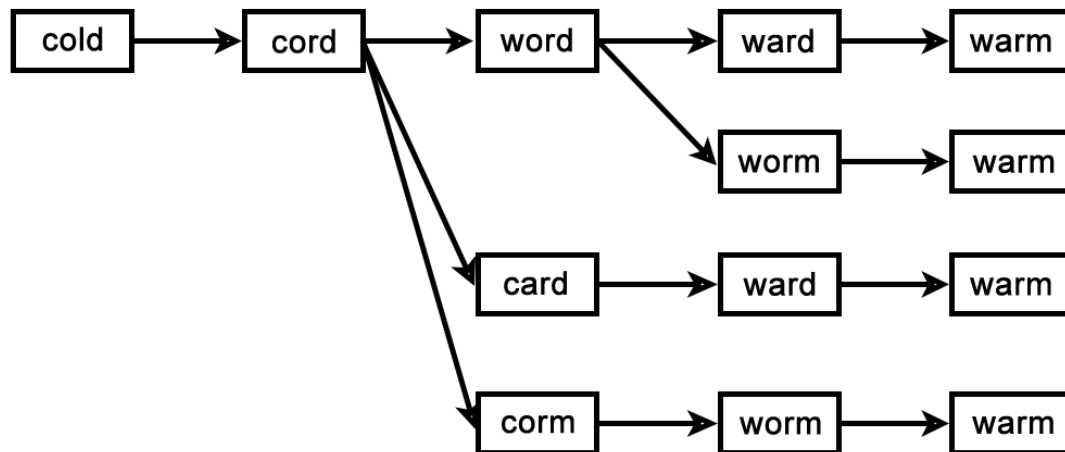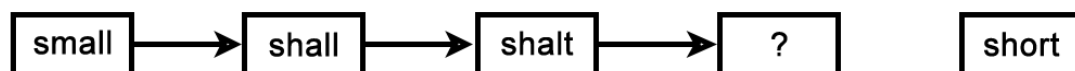# CSCI 630 HW1-P - Michael Lee (ml3406)

I tried to solve this problem manually before I started writing the program, and the results are shown as below:

1.   "cold" to "warm" (multiple paths):

2.   "small" to "short" (No path)

The algorithm of the program I wrote scans two words from left to right. If it finds an unmatched letter, it tries changing the letter and sees if the new word exists in the dictionary. If yes, continue to find the next unmatched letter; If no, don't change the letter and look for the next unmatched letter.

1.   The path from "cold" to "warm" found by the algorithm:

```
A path was found: cold -> cord -> word -> ward -> warm
```

2.   No path can be found from "small" to "short":

```
No path was found.
```