Advanced Programming

Assignment 1

Word Ladder Problem

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Intro

The solution has been developed using Python 2.7 in Linux environment (Ubuntu). The code can be **executed using the command *python task\_Ihtisham\_33083\_CSBS4\_B.py***

In this assignment we had to find a chain between two words in single steps using valid words in dictionary, chains between all words in the dictionary and find the longest chain among them. And use that data to create a frequency table distribution for the chain lengths.

Novelty

Learned how to use a large set of data, execute meaningful operations on it and then analyse the results. I had underestimated the total time to be taken when finding the chain between all words in the dictionary, leading to working with limited chains (single words to 3 letter words (till DEL)).

Also learned how to work with only required set of a large array e.g.

*dictionary[starting:starting+ending]*

Github Link: https://github.com/IhtishamShah/World-Ladder-Problem