Ap Assignment

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# Github url: <https://github.com/WaqasJaved1/advassignment1>

## Introduction

Word Ladder problem solved through breadth first search.

## Approach

Language Used: C# Software: Visual Studio 2013

Graph Structure: Lists of lists

Search Method: Breadth First

Json dictionary parsed and words get through external 3rd party library

BFS applied on graph producing result in from of console display, file writing and image of frequency distribution graph.

## What i learned

Implementation of BFS.

Analysis of data.

Cleared some more concept of C#.

Used Charts with C# for first time.

## How to run the PROGRAM?

All dependencies are already inside the project. Just launch project on visual studio and compile and run it.

At start enter the Max Numbers of letters you want to find graph of and functionality of program will be applied to generated graph only. This is ease for testing. Press 0 for make graph of all words in dictionary.

Select option

1->To find chain between user given words.

2->To find all words which have no chain(Will be written in a file in Document\No\_links.txt)

3->To find all of all dictionary words(Frequency distribution Chart will be generated and saved to Document\Chart.png)