

Abbreviation Generator

Model Description

Introduction

Program is computed to find the best acronym for the given word using python. I used given text file (trees.txt) as an input file and values.txt file to compute the lowest score for generated acronym. I assumed each word can generate 3 abbreviation and from those 3 abbreviations, choose acronym which is get lowest score after computing the score using given rules and values from values.txt. Finally create a new file with the list of original word and abbreviation.

Functions

✓ `getData()`

Get word list from the given file using `file.open()` function. And store those word inside the list and after removing all noises (hypens, single quotes and white spaces).

✓ `getValue()`

Get values and corresponding letters from values.txt and store inside the list named value.

✓ `makeAcronym()`

Get word list from `getData()` function and create 3 letter acronym for each word.(for one word has 3 acronym) I used for loop to iterate and used oupt variable to store first letter of each word as rule mentioned in task. And then check each other letters with values in values.txt and store relevant score inside mark variable which is initialized as 0 inside the function. After checked all the remaining letters stored valued inside mark variable and return it.

✓ `checkLowerScore()`

Get full list of abbreviation and it's score of each word. First get 3 score to separate array and the Initialized min variable and stored 1st value inside that and using for loop as iterator and used if function to compared other two values and store the lowest value inside min variable and store its acronym index inside another variable.

Python Assignment – SilvaLGSN - 2487422

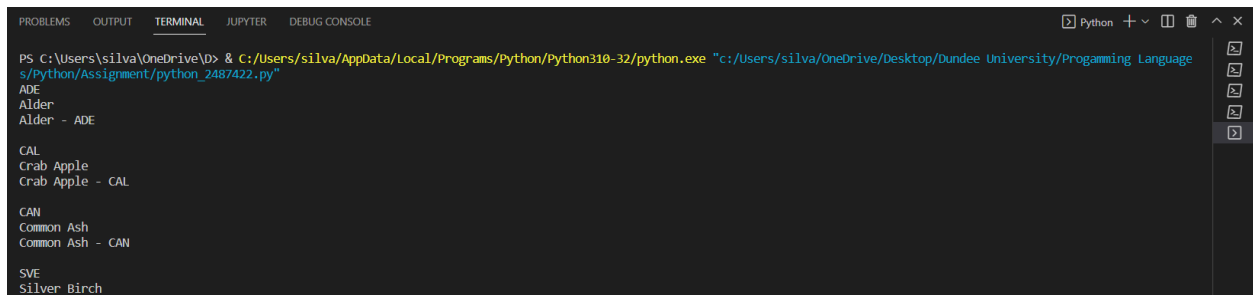
✓ finalAbbrList ()

Get original word and corresponding abbreviation inside an array. Create new file and write those values inside the file.

✓ Main Function

Main function is used to run the script and name output file as LASTNAME_INPUTNAMEFILE_ABBREVS with the extension of .txt. I used python os library to this work

Evidence



```
PS C:\Users\silva\OneDrive\D> & C:/Users/silva/AppData/Local/Programs/Python/Python310-32/python.exe "c:/Users/silva/OneDrive/Desktop/Dundee University/Programing Language s/Python/Assignment/python_2487422.py"
ADE
Alder
Alder - ADE

CAL
Crab Apple
Crab Apple - CAL

CAN
Common Ash
Common Ash - CAN

SVE
Silver Birch
```

Code References

- <https://www.w3schools.com/python/>
- <https://stackoverflow.com/>
- <https://www.geeksforgeeks.org/python-programming-language/>