English Auto-correct in Python

Introduction

Make a python program to automatically detect the spelling mistakes and correct it.

Objective is to implement the auto correct algorithm to find the misspelled word and give the most probable correct words list.

Abstract of Past Similar Approaches

1. <https://github.com/somyajain99/english-autocorrect>

* In this repository it calculates the given word with all the other words vocabulary and calculate the minimum edit distance.
* Print only the words that are smaller than edit distance of one or smaller.

1. <https://github.com/filyp/autocorrect/tree/master>

Minimum Edit Distance Algorithm

Given two string s1(target) and s2(source) this algorithm calculates the minimum edit distance to convert source to target

1. Recursion approach

min\_edit(stay,play)

Insert(p)`

Delete(p)

replace(p)

min\_edit(pstay,play)+1

min\_edit(tay,play)+1

min\_edit(ptay,play)+2

Insert(l)`

Delete(s)

replace(s)

min\_edit(plstay,play)+1

min\_edit(ptay,play)+1

min\_edit(pltay,play)+2

…

… … …

1. DP table approach

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| # | 0 | p | l | a | y |
| 0 | 0 | 1 | 2 | 3 | 4 |
| s | 1 | 2 | 3 | 4 | 5 |
| t | 2 | 3 | 4 | 5 | 6 |
| a | 3 | 4 | 5 | 4 | 4 |
| y | 4 | 5 | 6 | 5 | 4 |