2019-04-10 Levenshtein Edit Distance #2

Wednesday, April 10, 2019 3:01 PM

Bottom-Up Algorithm

	F	R	O	G
D	2	1	1	2
O	2	1	0	1
G	3	2	1	0

- Diagonal move /w no number change = leave alone
- Horizontal = remove
- Diagonal move w/ change = replace
- Vertically

Green

F	R	O	G
~	-	=	=
D		O	G

Blue

F	R	O	G
-	~	=	=
	D	O	G

	D	O	G
F	2	2	3
R	1	1	2
O	1	0	1
G	2	1	0

Green

D		O	G
~	+	=	=
F	R	O	G

Blue

	D	O	G
+	~	=	=
F	R	O	G

Rules for generating a cell value

- In the examples above, we start at the end (top down). Generally, Levenshtein is written bottom up (start at top left)
- Thus:
  - Down = add
  - Right = remove
  - Diagonal down-right = substitution

- We only perform the operation if there's a numeric increase

		D	O	G
	0	1	2	3
F	1	1	2	3
R	2	2	2	3
O	3	3	2	3
G	4	4	3	2