## 2019-04-10 Levenshtein Edit Distance #2

Wednesday, April 10, 2019 3:

3:01 PM

## Bottom-Up Algorithm

	F	R	0	6	
D	2	<b>←</b> 1	<b>6</b> 1	2	
0	2	1	<b>~</b> 0	1	
G	3	2	1	0	

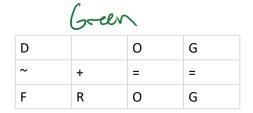
Green					
F	R	0	G		
~	-	=	=		
D		О	G		

•	Diagonal move /w
	no number change = leave alone

- Horizontal = remove
- Diagonal move w/ change = replace
- Vertically

Blue					
F	R	0	G		
-	~	=	=		
	D	О	G		

	D	О	G
F	2 ~	2	3
R	1 5	ìn	2
О	1	0 3/5	1
G	2	1	o



10				
	D	0	G	
+	~	=	=	
F	R	0	G	

Blu

## 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
  - o Right = remove
  - o Diagonal down-right = substitution

 $\circ\quad \mbox{We only perform the operation if there's a numeric increase$ 

	<b>1</b>	D	0	G
	(o)	1	2	3
F	1	(1)	2	3
R	2	2	2	3
0	3	3	2	3
G	4	4	3	2