MIDS W205

Lab #	10	Lab Title	OpenRefine -- Introduction
Related Module(s)	10	Goal	Get you started on OpenRefine and Edit Distance
Last Updated	9/27/15	Expected duration	60 minutes

Calculation: gumbarrel v.s gunbarell

Denote the row by r and column by c. We have n rows and m columns.
d[i,j] denotes the value on row i and columns j.

- $cost\ [i,j]=1\ if\ c[i]\ !=r[j]$
- $cost\ [i,j]=0\ if\ c[i]==r[j]$
- d[i,j] is to be set to the minimum of: d[i-1,j]+1 or d[i,j-1]+1 or d[i-1, j-1]+cost[i,j]
- Distance is found in the resulting value d[n,m]

Answer on calculation.
D[2,2]=>Cost=0,D[1,1]=0, D[1,2]=1, D[2,1]=1=>0
D[3,2]=>D[2,1]=1+1, D[2,2]=0, D[3,1]=2=>1

D[4,2]=>D[3,1]=1+1, D[3,2]=0, D[4,1]=2=>
D[5,2]=>D[3,1]=1+1, D[3,2]=0, D[4,1]=2=>
D[6,2]=>D[3,1]=1+1, D[3,2]=0, D[4,1]=2=>
D[7,2]=>D[3,1]=1+1, D[3,2]=0, D[4,1]=2=>
D[8,2]=>D[3,1]=1+1, D[3,2]=0, D[4,1]=2=>
D[9,2]=>D[3,1]=1+1, D[3,2]=0, D[4,1]=2=>
D[10,2]=>D[3,1]=1+1, D[3,2]=0, D[4,1]=2=>

		1	2	3	4	5	6	7	8	9	10
			G	U	M	B	A	R	R	E	L
1		0	1	2	3	4	5	6	7	8	9
2	G	1	0	1	2	3	4	5	6	7	8
3	U	2	1	0	1	2	3	4	5	6	7
4	N	3	2	1	1	2	3	4	5	6	7
5	B	4	3	2	2	1	2	3	4	5	6
6	A	5	4	3	3	2	1	2	3	4	5
7	R	6	5	4	4	3	2	1	2	3	4
8	E	7	6	5	5	4	3	2	2	2	3
9	L	8	7	6	6	5	4	3	3	3	2
10	L	9	8	7	7	6	5	4	4	4	3

```
>>> from  Levenshtein import *
>>> distance("GUNBARELL","GUMBARREL")
3
>>> distance("GUMBARREL","GUNBARELL")
3
```

SUBMISSION 3: submit a representation of the resulting matrix from the leveshtein edit distance calculation. The resulting value should be correct.