

Assignment -2  
Natural Language Processing  
CSCE 5290  
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Sentence:

Baker Betty Lou bought some butter. But it made her batter bitter. So, Baker Betty Lou bought.  
some better butter to make her bitter batter better.

Frequency

Word	Frequency	Vocabulary	Count
Baker_	2	_	23
Betty_	2	A	6
Lou_	2	B	15
Bought_	2	D	1
Some_	2	E	20
Bitter_	2	G	2
Butter_	2	H	4
But_	1	I	3
Made_	1	K	3
Her_	2	L	2
It_	1	M	4
Batter_	2	O	8
Better_	2	R	12
So_	1	S	3
Make_	1	T	25
To_	1	U	7

**For K=1(Combining e,r as er)**

Word	Frequency	Vocabulary	Count
B,a,k,er,_	2	_	26
B,e,t,t,y,_	2	A	6
L,o,u,_	2	B	15
B,o,u,g,h,t,_	2	D	1
S,o,m,e,_	2	E	8
B,l,t,t,er,_	2	G	2
B,u,t,t,er,_	2	H	4
B,u,t,_	1	I	3
M,a,d,e,_	1	K	3
H,er,_	2	L	2
I,t,_	1	M	4
B,a,t,t,er,_	2	O	8
B,e,t,t,er,_	2	R	0
S,o,_	1	S	3
M,a,k,e,_	1	T	25
T,o,_	1	u	7
		er	12

**For K=2(Combining er and \_)**

Word	Frequency	Vocabulary	Count
B,a,k,er_	2	_	14
B,e,t,t,y,_	2	A	6
L,o,u,_	2	B	15
B,o,u,g,h,t,_	2	D	1
S,o,m,e,_	2	E	8
B,l,t,t,er_	2	G	2
B,u,t,t,er_	2	H	4
B,u,t,_	1	I	3
M,a,d,e,_	1	K	3
H,er_	2	L	2
I,t,_	1	M	4
B,a,t,t,er_	2	O	8
B,e,t,t,er_	2	S	3
S,o,_	1	T	25
M,a,k,e,_	1	U	7
T,o,_	1	Er	0
		Er_	12

**K=3 (Combining t,t)**

Word	Frequency	Vocabulary	Count
B,a,k,er_	2	_	14
B,e,tt,y,_	2	A	6
L,o,u,_	2	B	15
B,o,u,g,h,t,_	2	D	1
S,o,m,e,_	2	E	8
B,l,tt,er_	2	G	2
B,u,tt,er_	2	H	4
B,u,t,_	1	I	3
M,a,d,e,_	1	K	3
H,er_	2	L	2
I,t,_	1	M	4
B,a,tt,er_	2	O	8
B,e,tt,er_	2	S	3
S,o,_	1	T	5
M,a,k,e,_	1	U	7
T,o,_	1	Er	0
		Er_	12
		tt	10

**K=4 (Combining tt,er\_)**

Word	Frequency	Vocabulary	Count
B,a,k,er_	2	_	14
B,e,tt,y,_	2	A	6
L,o,u,_	2	B	15
B,o,u,g,h,t,_	2	D	1
S,o,m,e,_	2	E	8
B,l,tter_	2	G	2
B,u,tter_	2	H	4
B,u,t,_	1	I	3
M,a,d,e,_	1	K	3
H,er_	2	L	2
I,t,_	1	M	4
B,a,tter_	2	O	8
B,e,tter_	2	S	3
S,o,_	1	T	5
M,a,k,e,_	1	U	7
T,o,_	1	Er	0
		Er_	4
		tt	2
		Tter_	8

**K=5 (Combining b,a)**

Word	Frequency	Vocabulary	Count
Ba,k,er_	2	_	14
B,e,tt,y,_	2	A	2
L,o,u,_	2	B	11
B,o,u,g,h,t,_	2	D	1
S,o,m,e,_	2	E	8
B,l,tter_	2	G	2
B,u,tter_	2	H	4
B,u,t,_	1	I	3
M,a,d,e,_	1	K	3
H,er_	2	L	2
I,t,_	1	M	4
Ba,tter_	2	O	8
B,e,tter_	2	S	3
S,o,_	1	T	5
M,a,k,e,_	1	U	7
T,o,_	1	Er	0
		Er_	4
		tt	2
		Tter_	8
		ba	4

**K=6 (Combining b,e)**

Word	Frequency	Vocabulary	Count
Ba,k,er_	2	_	14
Be,tt,y,_	2	A	2
L,o,u,_	2	B	7
B,o,u,g,h,t,_	2	D	1
S,o,m,e,_	2	E	4
B,l,tter_	2	G	2
B,u,tter_	2	H	4
B,u,t,_	1	I	3
M,a,d,e,_	1	K	3
H,er_	2	L	2
I,t,_	1	M	4
Ba,tter_	2	O	8
Be,tter_	2	S	3
S,o,_	1	T	5
M,a,k,e,_	1	U	7
T,o,_	1	Er	0
		Er_	4
		tt	2
		Tter_	8
		ba	4
		Be	4

**K=7 (Combining o,u)**

Word	Frequency	Vocabulary	Count
Ba,k,er_	2	_	14
Be,tt,y,_	2	A	2
L,ou,_	2	B	7
B,ou,g,h,t,_	2	D	1
S,o,m,e,_	2	E	4
B,l,tter_	2	G	2
B,u,tter_	2	H	4
B,u,t,_	1	I	3
M,a,d,e,_	1	K	3
H,er_	2	L	2
I,t,_	1	M	4
Ba,tter_	2	O	4
Be,tter_	2	S	3
S,o,_	1	T	5
M,a,k,e,_	1	U	3
T,o,_	1	Er	0
		Er_	4
		tt	2
		Tter_	8
		ba	4
		Be	4
		Ou	4