

Assignment 1: Answer Sheet

Name

ID Number

Part 1.b

What is the number of tokens in the corpus? $N =$

Part 1.d

What are the counts of the following words after lemmatization?

“that”:

“the”:

“london”:

“honor”:

“.”:

Part 1.e

How many times does the bigram (“good”, “company”) occur in windows of size 1?

How many times does the bigram (“old”, “friend”) occur in windows of size 3?

Part 1.f

Is (“mr.”, “skimpole”) among collocation candidates for window size 1? (Yes/No)

Is (“large”, “fortune”) among collocation candidates for window size 3? (Yes/No)

Part 2.a

Rank	Word	Score	$c(w_1w_2)$	$c(w_1)$	$c(w_2)$
1					
2					
3					
4					
5					
6					
7					
8					
9					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					

Table 1: Top collocation candidates, student's t-test (window size 1)

Rank	Word	Score	$c(w_1w_2)$	$c(w_1)$	$c(w_2)$
1					
2					
3					
4					
5					
6					
7					
8					
9					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					

Table 2: Top collocation candidates, chi-squared test (window size 1)

Rank	Word	Score	$c(w_1w_2)$	$c(w_1)$	$c(w_2)$
1					
2					
3					
4					
5					
6					
7					
8					
9					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					

Table 3: Top collocation candidates, likelihood ratio test (window size 1)

Rank	Word	Score	$c(w_1w_2)$	$c(w_1)$	$c(w_2)$
1					
2					
3					
4					
5					
6					
7					
8					
9					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					

Table 4: Top collocation candidates, student's t-test (window size 3)

Rank	Word	Score	$c(w_1w_2)$	$c(w_1)$	$c(w_2)$
1					
2					
3					
4					
5					
6					
7					
8					
9					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					

Table 5: Top collocation candidates, chi-squared test (window size 3)

Rank	Word	Score	$c(w_1w_2)$	$c(w_1)$	$c(w_2)$
1					
2					
3					
4					
5					
6					
7					
8					
9					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					

Table 6: Top collocation candidates, likelihood ratio test (window size 3)

Part 3.a

Is (“good”, “wish”) a collocation according to the three tests with window size 1?

Test	Score	Threshold	Collocation? (Yes/No)
t-Test			
Chi-square Test			
Likelihood Ratio Test			

Table 7: Tests results for (“good”, “wish”)

Is (“high”, “spirit”) a collocation according to the three tests with window size 1?

Test	Score	Threshold	Collocation? (Yes/No)
t-Test			
Chi-square Test			
Likelihood Ratio Test			

Table 8: Tests results for (“high”, “spirit”)