## Information Retrieval Report

#### positional Index

word angels appeared at document 7 at positions 0 word angels appeared at document 8 at positions 0 word angels appeared at document 9 at positions 0 word antony appeared at document 1 at positions 0 word antony appeared at document 2 at positions 0 word antony appeared at document 6 at positions 0 word brutus appeared at document 1 at positions 1 word brutus appeared at document 2 at positions 1 word brutus appeared at document 4 at positions 0 word caeser appeared at document 1 at positions 2 word caeser appeared at document 2 at positions 2 word caeser appeared at document 4 at positions 1 word caeser appeared at document 5 at positions 0 word caeser appeared at document 6 at positions 1 word calpurnia appeared at document 2 at positions 3 word cleopatra appeared at document 1 at positions 3 word fear appeared at document 7 at positions 2 word fear appeared at document 8 at positions 2 word fear appeared at document 10 at positions 1 word fools appeared at document 7 at positions 1 word fools appeared at document 8 at positions 1 word fools appeared at document 9 at positions 1 word fools appeared at document 10 at positions 0 word in appeared at document 7 at positions 3 word in appeared at document 8 at positions 3 word in appeared at document 9 at positions 2 word in appeared at document 10 at positions 2 word mercy appeared at document 1 at positions 4 word mercy appeared at document 3 at positions 0 word mercy appeared at document 4 at positions 2 word mercy appeared at document 5 at positions 1 word mercy appeared at document 6 at positions 2

word rush appeared at document 7 at positions 4 word rush appeared at document 8 at positions 4 word rush appeared at document 9 at positions 3 word rush appeared at document 10 at positions 3 word to appeared at document 7 at positions 5 word to appeared at document 8 at positions 5 word to appeared at document 9 at positions 4 word to appeared at document 10 at positions 4 word tread appeared at document 7 at positions 6 word tread appeared at document 8 at positions 6 word tread appeared at document 9 at positions 5 word tread appeared at document 10 at positions 5 word where appeared at document 7 at positions 7 word where appeared at document 8 at positions 7 word where appeared at document 9 at positions 6 word where appeared at document 10 at positions 6 word worser appeared at document 1 at positions 5 word worser appeared at document 3 at positions 1 word worser appeared at document 4 at positions 3 word worser appeared at document 5 at positions 2

## Term Frequency

	1	2	3	4	5	6	7	8	9	10
angels	0	0	0	0	0	0	1	1	1	0
antony	1	1	0	0	0	1	0	0	0	0
brutus	1	1	0	1	0	0	0	0	0	0
caeser	1	1	0	1	1	1	0	0	0	0
calpurnia	0	1	0	0	0	0	0	0	0	0
cleopatra	1	0	0	0	0	0	0	0	0	0
fear	0	0	0	0	0	0	1	1	0	1
fools	0	0	0	0	0	0	1	1	1	1
in	0	0	0	0	0	0	1	1	1	1
mercy	1	0	1	1	1	1	0	0	0	0
rush	0	0	0	0	0	0	1	1	1	1
to	0	0	0	0	0	0	1	1	1	1
tread	0	0	0	0	0	0	1	1	1	1
where	0	0	0	0	0	0	1	1	1	1
worser	1	0	1	1	1	0	0	0	0	0

## **Inverse Document Frequency**

angels	3	0.52288
antony	3	0.52288
brutus	3	0.52288
caeser	5	0.30103
calpurnia	1	1.00000
cleopatra	1	1.00000
fear	3	0.52288
fools	4	0.39794
in	4	0.39794
mercy	5	0.30103
rush	4	0.39794
to	4	0.39794
tread	4	0.39794
where	4	0.39794
worser	4	0.39794

### TF-IDF

	1	2	3	4	5	6	7	8	9	10
angels	0.000	0.000	0.000	0.000	0.000	0.000	0.523	0.523	0.523	0.000
antony	0.523	0.523	0.000	0.000	0.000	0.523	0.000	0.000	0.000	0.000
brutus	0.523	0.523	0.000	0.523	0.000	0.000	0.000	0.000	0.000	0.000
caeser	0.301	0.301	0.000	0.301	0.301	0.301	0.000	0.000	0.000	0.000
calpurnia	0.000	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
cleopatra	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
fear	0.000	0.000	0.000	0.000	0.000	0.000	0.523	0.523	0.000	0.523
fools	0.000	0.000	0.000	0.000	0.000	0.000	0.398	0.398	0.398	0.398
in	0.000	0.000	0.000	0.000	0.000	0.000	0.398	0.398	0.398	0.398
mercy	0.301	0.000	0.301	0.301	0.301	0.301	0.000	0.000	0.000	0.000
rush	0.000	0.000	0.000	0.000	0.000	0.000	0.398	0.398	0.398	0.398
to	0.000	0.000	0.000	0.000	0.000	0.000	0.398	0.398	0.398	0.398
tread	0.000	0.000	0.000	0.000	0.000	0.000	0.398	0.398	0.398	0.398
where	0.000	0.000	0.000	0.000	0.000	0.000	0.398	0.398	0.398	0.398
worser	0.398	0.000	0.398	0.398	0.398	0.000	0.000	0.000	0.000	0.000

## **Document Length**

1	1.3734623153231016
2	1.2796184676775093
3	0.49897425664192124
4	0.782940961597204
5	0.5827472583211477
6	0.6742701972094371
7	1.2234957570597818
8	1.2234957570597818
9	1.1061372813884127
10	1.1061372813884127

### Normalized TF-IDF

	1	2	3	4	5	6	7	8	9	10
angels	0.000	0.000	0.000	0.000	0.000	0.000	0.427	0.427	0.473	0.000
antony	0.381	0.409	0.000	0.000	0.000	0.775	0.000	0.000	0.000	0.000
brutus	0.381	0.409	0.000	0.668	0.000	0.000	0.000	0.000	0.000	0.000
caeser	0.219	0.235	0.000	0.384	0.517	0.446	0.000	0.000	0.000	0.000
calpurnia	0.000	0.781	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
cleopatra	0.728	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
fear	0.000	0.000	0.000	0.000	0.000	0.000	0.427	0.427	0.000	0.473
fools	0.000	0.000	0.000	0.000	0.000	0.000	0.325	0.325	0.360	0.360
in	0.000	0.000	0.000	0.000	0.000	0.000	0.325	0.325	0.360	0.360
mercy	0.219	0.000	0.603	0.384	0.517	0.446	0.000	0.000	0.000	0.000
rush	0.000	0.000	0.000	0.000	0.000	0.000	0.325	0.325	0.360	0.360
to	0.000	0.000	0.000	0.000	0.000	0.000	0.325	0.325	0.360	0.360
tread	0.000	0.000	0.000	0.000	0.000	0.000	0.325	0.325	0.360	0.360
where	0.000	0.000	0.000	0.000	0.000	0.000	0.325	0.325	0.360	0.360
worser	0.290	0.000	0.798	0.508	0.683	0.000	0.000	0.000	0.000	0.000

# Matched Documents For the query Matched Documents Are:1,2,6