

CS276

Information Retrieval and Web Mining

Lecture 1

Query

- Which plays of Shakespeare contain the words ***Brutus AND Caesar*** but ***NOT Calpurnia***?
- One could grep all of Shakespeare's plays for ***Brutus*** and ***Caesar***, then strip out lines containing ***Calpurnia***?
 - Slow (for large corpora)
 - ***NOT Calpurnia*** is non-trivial
 - Other operations (e.g., find the word ***Romans*** near ***countrymen***) not feasible

Term-document incidence

	Antony and Cleopatra	Julius Caesar	The Tempest	Hamlet	Othello	Macbeth
Antony	1	1	0	0	0	1
Brutus	1	1	0	1	0	0
Caesar	1	1	0	1	1	1
Calpurnia	0	1	0	0	0	0
Cleopatra	1	0	0	0	0	0
mercy	1	0	1	1	1	1
worser	1	0	1	1	1	0

Brutus AND Caesar but NOT Calpurnia

1 if play contains word, 0 otherwise