

Question 8 answer:

Relation 1)

: opposite-words  
old young boy girl  
talk quite big small  
far near alive died

Relation 2)

: politics  
donald republicans clinton democrat  
republicans florida democrat california  
president american minister israel

politics  
[0.0, 0.0, 33.33333333333333]  
opposite-words  
[33.33333333333333, 33.33333333333333, 33.33333333333333]

**Final answer**

{'politics': [0.0, 0.0, 33.33333333333333], 'opposite-words': [33.33333333333333, 33.33333333333333, 33.33333333333333]}

Category	1-best	5-best	10-best
opposite-words	0%	0%	33.33%
politics	33.33%	33.33%	33.33%

Interesting observations:

While creating set of sentences for two new categories and making some trials I realized that the closer two words appear in sentence, their relationship is stronger. This is true for any two words found together in real life sentence or any document. Thus I decided to be adversarial and tried to find out words are far apart from each other and in the process I got zero 1-best and zero 5-best score for my 'opposite-words' category.