

Interactive / complex / 6

IC 1	query	Interactive / complex / 6			
IC 2	title	Tag co-occurrence			
IC 3	pattern	 <pre> graph TD person[person: Person] -- knows*1..2 --> otherPerson[otherPerson: Person] tag[tag: Tag] -- hasTag --> post[Post] otherTag[otherTag: Tag] -- hasTag --> post post -- hasCreator --> otherPerson subgraph count post end </pre> <p>The diagram illustrates the query pattern. It features three main entity types: Person (orange), Tag (pink), and Post (red). A Person entity (labeled <code>person: Person</code>) with a variable <code>id = \$personId</code> is connected via a <code>knows*1..2</code> relationship to another Person entity (labeled <code>otherPerson: Person</code>). A Tag entity (labeled <code>tag: Tag</code>) with a variable <code>name = \$tagName</code> is connected via a <code>hasTag</code> relationship to a Post entity. Another Tag entity (labeled <code>otherTag: Tag</code>) with a variable <code>name ≠ \$tagName</code> is also connected via a <code>hasTag</code> relationship to the same Post entity. The Post entity is enclosed in a box labeled <code>count</code>, indicating that the count of posts is being calculated. A <code>hasCreator</code> relationship connects the Post entity back to the <code>otherPerson: Person</code> entity.</p>			
IC 6	desc.	Given a start Person and some Tag, find the other Tags that occur together with this Tag on Posts that were created by start Person's friends and friends of friends (excluding start Person). Return top 10 Tags, and the count of Posts that were created by these Persons, which contain both this Tag and the given Tag.			
IC 7	params	1	personId	ID	
IC 8		2	tagName	Long String	
IC 9	result	1	otherTag.name	Long String	R
IC 10		2	postCount	32-bit Integer	A
IC 11		Number of Posts that were created by friends and friends of friends, which have the Tag otherTag			
IC 12	sort	1	postCount	↓	
IC 13		2	otherTag.name	↑	
IC 14	limit	10			
	CPs	5.1, 8.2			
	relevance	This query looks for paths of lengths three or four, starting from a given Person, moving to friends or friends of friends, then to Posts and finally ending at a given Tag.			