

## 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 --&gt; otherPerson[otherPerson: Person]     person -- id = \$personId --&gt; person     tag[tag: Tag] -- hasTag --&gt; post[Post]     otherTag[otherTag: Tag] -- hasTag --&gt; post     post -- count --&gt; count[count]     post -- hasCreator --&gt; otherPerson             </pre> <p>The diagram illustrates the query pattern. It starts with a <b>person: Person</b> entity (orange box) which has a variable <code>id = \$personId</code>. This person is connected via a <code>knows*1..2</code> relationship to an <b>otherPerson: Person</b> entity (orange box). The <b>otherPerson</b> entity is the creator of a <b>Post</b> entity (red box), indicated by a <code>hasCreator</code> relationship. The <b>Post</b> entity is associated with a <code>count</code> variable. Two <b>Tag</b> entities are shown: <b>tag: Tag</b> (pink box) with variable <code>name = \$tagName</code>, and <b>otherTag: Tag</b> (pink box) with variable <code>name ≠ \$tagName</code>. Both tags are connected to the <b>Post</b> entity via <code>hasTag</code> relationships.</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 11	params	1	personId	ID	
IC 12		2	tagName	Long String	
IC 13	result	1	otherTag.name	Long String	R
IC 14		2	postCount	32-bit Integer	A
		Number of Posts that were created by friends and friends of friends, which have the Tag otherTag			
	sort	1	postCount	↓	
		2	otherTag.name	↑	
	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.			