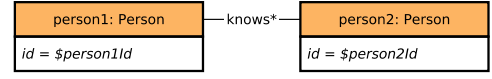
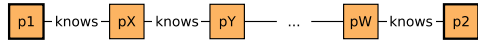
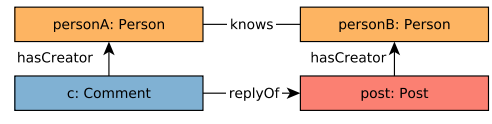
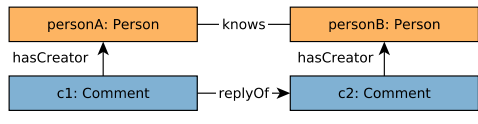


## Interactive / complex / 14

IC 1	query	Interactive / complex / 14			
IC 2	title	Trusted connection paths			
IC 3	pattern	<p>Enumerate all shortest paths on knows edges from person1 to person2.</p>  <p>For each edge on the path, calculate a weight based on interactions between the pair of Persons of the edge, are calculated as a sum of cases #1 and #2 for the Persons (both ways), and the sum of these weights determine the total weight of each path.</p>  <p>case 1: Replies on Posts, weight += 1.0 * count(c)</p>  <p>case 2: Replies on Comments, weight += 0.5 * count(c1)</p> 			
IC 4					
IC 5					
IC 6					
IC 7					
IC 8					
IC 9					
IC 10	desc.	<p>Given two Persons, find all (unweighted) shortest paths between these two Persons, in the sub-graph induced by the knows relationship.</p> <p>Then, for each path calculate a weight. The nodes in the path are Persons, and the weight of a path is the sum of weights between every pair of consecutive Person nodes in the path.</p> <p>The weight for a pair of Persons is calculated based on their interactions:</p> <ul style="list-style-type: none"> <li>• Every direct reply (by one of the Persons) to a Post (by the other Person) contributes 1.0.</li> <li>• Every direct reply (by one of the Persons) to a Comment (by the other Person) contributes 0.5.</li> </ul> <p>Return all the paths with shortest length, and their weights. Do not return any rows if there is no path between the two Persons.</p>			
IC 11					
IC 12					
IC 13					
IC 14					
	params	1	person1.id	ID	person1Id
		2	person2.id	ID	person2Id
	result	1	[Person.id]	[ID]	C personIdsInPath – identifiers representing an ordered sequence of the Persons in the path
		2	weight	64-bit Float	C pathWeight
	sort	1	weight	↓	The order of paths with the same weight is unspecified
	CPs	3.3, 7.2, 7.3, 8.1, 8.2, 8.3, 8.6			
	relevance	<p>This query looks for a variable length path, starting at a given Person and finishing at an another given Person. This is a more complex query as it not only requires computing the path length, but returning it and computing a weight. To compute this weight one must look for smaller sub-queries with paths of length three, formed by the two Persons at each step, a Post and a Comment.</p>			