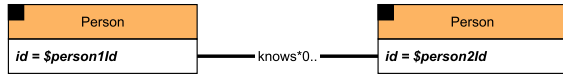


## Interactive / complex / 13

IC 1	query	Interactive / complex / 13				
IC 2	title	Single shortest path				
IC 3	pattern					
IC 4						
IC 5						
IC 6						
IC 7	description	Given two Persons with IDs \$person1Id and \$person2Id, find the shortest path between these two Persons in the subgraph induced by the knows edges. Return the length of this path:				
IC 8		<ul style="list-style-type: none"><li>• -1: no path found</li></ul>				
IC 9		<ul style="list-style-type: none"><li>• 0: start person = end person</li></ul>				
IC 10		<ul style="list-style-type: none"><li>• &gt; 0: path found (start person ≠ end person)</li></ul>				
IC 11						
IC 12	params	1	\$person1Id	ID	In SNB Interactive v2, this query has two variants: (b) Guaranteed that there is no path between the two Persons (b) Guaranteed that there is a 4-hop path between the two Persons	
IC 13		2	\$person2Id	ID		
IC 14v1						
IC 14v2	result	1	shortestPathLength	32-bit Integer	C	
	CPs	3.3, 7.2, 7.3, 7.5, 7.8, 8.1, 8.6				
	relevance	This query looks for a variable length path, starting at a given Person and finishing at an another given Person. Proper cardinality estimation and search space pruning, will be crucial. This query also allows for possible parallel implementations.				