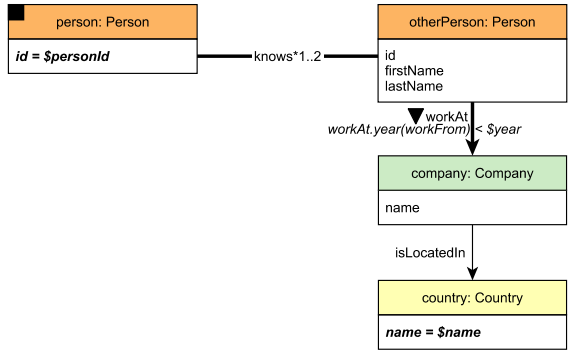


Interactive / complex / 11

IC 1	query	Interactive / complex / 11																											
IC 2	title	Job referral																											
IC 3	pattern																												
IC 4																													
IC 5																													
IC 6																													
IC 7																													
IC 8																													
IC 9																													
IC 10																													
IC 11																													
IC 12																													
IC 13																													
IC 14v1	description	Given a start Person with ID \$personId, find that Person’s friends and friends of friends (excluding start Person) who started working in some Company in a given Country with name \$countryName, before a given date (\$workFromYear).																											
IC 14v2																													
	params	<table><tr><td>1</td><td>\$personId</td><td>ID</td><td></td></tr><tr><td>2</td><td>\$countryName</td><td>String</td><td></td></tr><tr><td>3</td><td>\$workFromYear</td><td>32-bit Integer</td><td></td></tr></table>	1	\$personId	ID		2	\$countryName	String		3	\$workFromYear	32-bit Integer																
1	\$personId	ID																											
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	result	<table><tr><td>1</td><td>otherPerson.id</td><td>ID</td><td>R</td><td></td></tr><tr><td>2</td><td>otherPerson.firstName</td><td>String</td><td>R</td><td></td></tr><tr><td>3</td><td>otherPerson.lastName</td><td>String</td><td>R</td><td></td></tr><tr><td>4</td><td>company.name</td><td>String</td><td>R</td><td></td></tr><tr><td>5</td><td>workAt.workFrom</td><td>32-bit Integer</td><td>R</td><td></td></tr></table>	1	otherPerson.id	ID	R		2	otherPerson.firstName	String	R		3	otherPerson.lastName	String	R		4	company.name	String	R		5	workAt.workFrom	32-bit Integer	R			
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	sort	<table><tr><td>1</td><td>workAt.workFrom</td><td>↑</td><td></td></tr><tr><td>2</td><td>otherPerson.id</td><td>↑</td><td></td></tr><tr><td>3</td><td>company.name</td><td>↓</td><td></td></tr></table>	1	workAt.workFrom	↑		2	otherPerson.id	↑		3	company.name	↓																
1	workAt.workFrom	↑																											
2	otherPerson.id	↑																											
3	company.name	↓																											
	limit	10																											
	CPs	1.3, 2.3, 2.4, 3.3, 4.2																											
	relevance	This query looks for paths of length two or three, starting from a Person, moving to friends or friends of friends, and ending at a Company. In this query, there are selective joins and a top-k order by that can be exploited for optimizations.																											