Interactive / complex / 11

query	Interactive / complex / 11
title	Job referral
pattern	
desc.	Given a start Person, find that Person's friends and friends of friends (excluding start Person) who started working in some Company in a given Country, before a given date (year).

pattern diagram:

person: Person — id = $personId — knows*1..2 — otherPerson: Person (id, firstName, lastName) — workAt year(workFrom) < $year → company: Company (name) — isLocatedIn → country: Country (name = $name)

params

1	personId	ID	
2	countryName	String	
3	workFromYear	32-bit Integer	

result

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	

sort

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.