Tuple Relational Calculus Example

Selected Schemata

- Project = {<u>pNumber</u>, pName, description, npv, irr, *advisorSIN^E*}
- Company = { companyName, city, netWorth, CEOfirstName, CEOlastName}
- Undertakes = {<u>*pNumber^P*</u>, <u>*companyName^C*</u>, *monitorSIN^E*}

Question

Return the project numbers, names and company names of projects that are monitored by employee 222 and that are undertaken by Vancouver companies (only include Vancouver company names in the result).

Solution

{t | ∃p∈Project ∃u∈Undertakes ∃c∈Company (p.pNumber = u.pNumber ∧ u.monitorSIN = 222 ∧ c.companyName = u.companyName ∧ c.city = "Vancouver" ∧ t.pNumber = p.pNumber ∧ t.pName = p.pName ∧ t.cName = c.cName)}