Queries over YAGO and LDBC-SNB datasets

Table 1: Queries for the YAGO Dataset.

YAGO Query ID	**Path expressions as CQT queries**
Q1	x1, x2 ← (x1, isMarriedTo/livesIn/isLocatedIn+/dealsWith+, x2)
Q2	x1, x2 ← (x1, hasChild/livesIn/isLocatedIn+/dealsWith+, x2)
Q3	x1, x2 ← (x1, influences/livesIn/isLocatedIn+/dealsWith+, x2)
Q4	x1, x2 ← (x1, livesIn/isLocatedIn+/dealsWith+, x2)
Q5	x1, x2 ← (x1, hasAcademicAdvisor/livesIn/isLocatedIn+/dealsWith+, x2)
Q6	x1, x2 ← (x1, isLocatedIn+/dealsWith+, x2)
Q7	x1, x2 ← (x1, (actedIn/actedIn)+, x2)
Q8	x1, x2 ← (x1, isLocatedIn+/dealsWith|dealsWith, x2)
Q9	x1, x2 ← (x1, isMarriedTo/owns/isLocatedIn+|owns/isLocatedIn+, x2)
Q10	x1, x2 ← (x1, isLocatedIn+/dealsWith, x2)
Q11	x1, x2 ← (x1, isLocatedIn+/dealsWith+, x2)
Q12	x1, x2 ← (x1, wasBornIn/isLocatedIn+/isConnectedTo+, x2)
Q13	x1, x2 ← (x1, wasBornIn/(isLocatedIn|isConnectedTo)+, x2)
Q14	x1, x2 ← (x1, wasBornIn/isLocatedIn+, x2)
Q15	x1, x2 ← (x1, isLocatedIn+/(isConnectedTo|dealsWith)+, x2)
Q16	x1, x2 ← (x1, -isConnectedTo+/isLocatedIn+, x2)
Q17	x1, x2 ← (x1, isLocatedIn+/isLocatedIn, x2)
Q18	x1, x2 ← (x1, isLocatedIn+/isConnectedTo+/dealsWith+, x2)

Table 2: Queries for the LDBC-SNB Dataset.

LDBC Query Label	**Path expressions as CQT queries**
IC1	x1, x2 ← (x1, knows1..3/(isL|(workAt|studyAt)/isL), x2)
IC2	x1, x2 ← (x1, knows/-hasC, x2)
IC6	x1, x2 ← (x1, knows1..2/(-hasC[hasT])[hasT], x2)
IC7	x1, x2 ← (x1, (-hasC/-likes)|((-hasC / -likes) ∩ knows), x2)
IC8	x1, x2 ← (x1, -hasC/-replyOf/hasC, x2)
IC9	x1, x2 ← (x1, knows1..2/-hasC, x2)
IC11	x1, x2 ← (x1, knows1..2/workAt/isL, x2)
IC12	x1, x2 ← (x1, knows/-hasC/replyOf/hasT/hasTY/isSubC+, x2)
IC13	x1, x2 ← (x1, knows+, x2)
IC14	x1, x2 ← (x1, (knows ∩ (-hasC/replyOf/hasC))+, x2)
Y1	x1, x2 ← (x1, knows+/studyAt/isL+/isP+, x2)
Y2	x1, x2 ← (x1, likes/hasC/knows+/isL+, x2)
Y3	x1, x2 ← (x1, likes/replyOf+/isL+/isP+, x2)
Y4	x1, x2 ← (x1, hasM/(studyAt|workAt)/isL+/isP+, x2)
Y5	x1, x2 ← (x1, -hasM/([cof]hasT)/hasTY/isSubC+, x2)
Y6	x1, x2 ← (x1, replyOf+/isL+/isP+, x2)
Y7	x1, x2 ← (x1, hasMod/hasI/hasTY/isSubC+, x2)
Y8	x1, x2 ← (x1, ([cof/hasC]hasM)/isL/isP+, x2)
IS2	x1, x2 ← (x1, -hasC/replyOf+/hasC, x2)
IS6	x1, x2 ← (x1, replyOf+/-cof/hasM, x2)
IS7	x1, x2 ← (x1, (-hasC/replyOf/hasC)|((-hasC/replyOf/hasC) ∩ knows), x2)
BI11	x1, x2 ← (x1, (([isL/isP]knows)[isL/isP]) ∩ (knows/([isL/isP]knows))), x2)
BI10	x1, x2 ← (x1, (knows+[isL/isP])/(-hasC[hasT])/hasT/hasTY, x2)
BI3	x1, x2 ← (x1, -isP/-isL/-hasMod/cof/-replyOf+/hasT/hasTY, x2)
BI9	x1, x2 ← (x1, replyOf+/hasC, x2)
BI20	x1, x2 ← (x1, (knows ∩ (studyAt/-studyAt))+, x2)
LSQB1	x1, x2 ← (x1, -isP/-isL/-hasM/cof/-replyOf+/hasT/hasTY, x2)
LSQB4	x1, x2 ← (x1, ((likes[hasT])[-replyOf])/hasC, x2)
LSQB5	x1, x2 ← (x1, -hasT/-replyOf/hasT, x2)
LSQB6	x1, x2 ← (x1, knows/knows/hasI, x2)
	isL=isLocatedIn, hasT=hasTag, isP=isPartOf, isSubC=isSubClassOf, hasTY=hasType, coF=containerOf, hasMod=hasModerator, hasC=hasCreator, hasM=hasMember, hasI=hasInterest