Enumerate all unweighted shortest paths on knows edges between person1 to person2.

person1: Person | knows* | person2: Person
id = $person1Id | | id = $person2Id
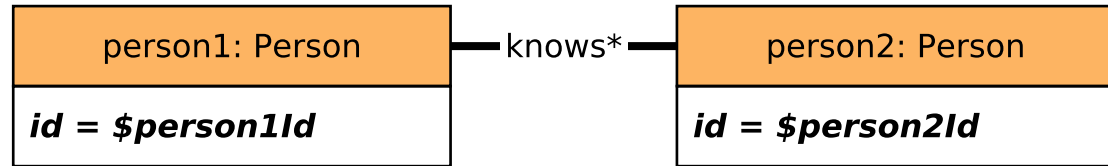
For each knows edge in the path, calculate a weight based on interactions between the pair of Persons of the edge, calculated as a sum of cases #1 and #2 for the Persons (both ways), and the sum of these weights determine the total weight of each path.

p1 — knows — pX — knows — pY — ... — pW — knows — p2
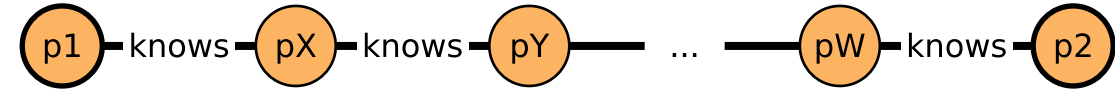
Case 1: Replies on Posts, weight += 1.0 × count(c)

personA: Person — knows — personB: Person
hasCreator ↑ | hasCreator ↑
c: Comment — replyOf → post: Post
containerOf ↑
forum: Forum
$start ≤ creationDate and creationDate ≤ $end
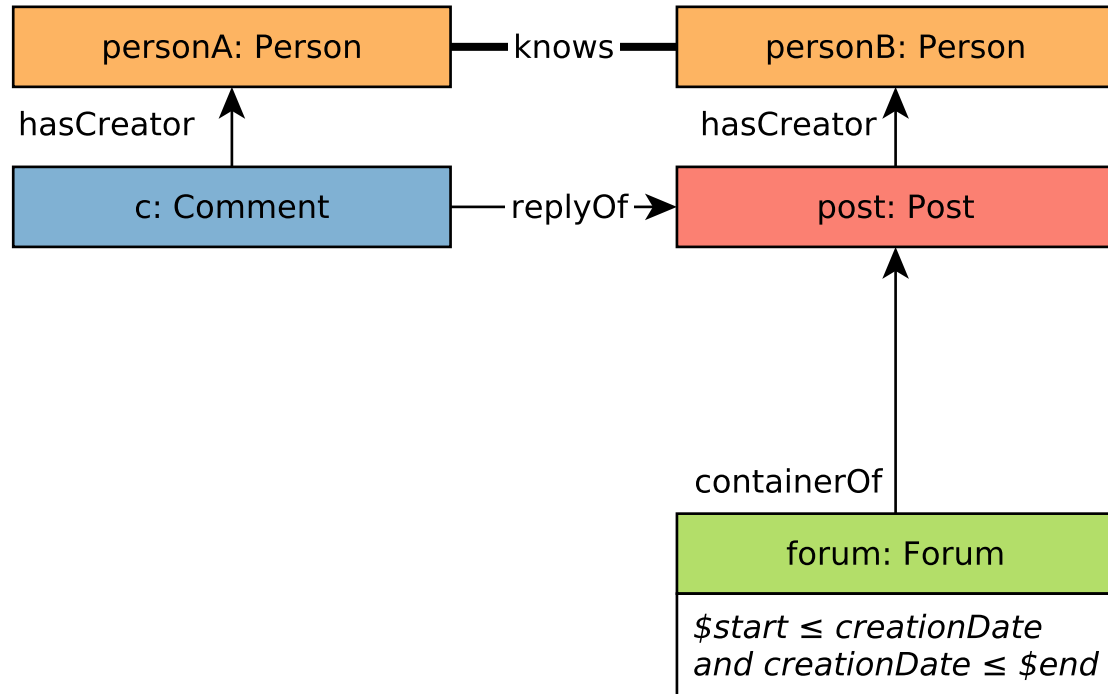
Case 2: Replies on Comments, weight += 0.5 × count(c1)

personA: Person — knows — personB: Person
hasCreator ↑ | hasCreator ↑
c1: Comment — replyOf → c2: Comment
replyOf* ↓
Post
containerOf ↑
forum: Forum
$start ≤ creationDate and creationDate ≤ $end