

Interactive / complex / 14

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|-------|-----------|--|-----------------|--------------|
| IC 1 | query | Interactive / complex / 14 | | |
| IC 2 | title | Trusted connection paths | | |
| IC 3 | pattern | <div> <div> <p>Enumerate all unweighted shortest paths on knows edges from person1 to person2.</p> </div> <div> <p>For each edge on the path, calculate a weight based on interactions between the pair of Persons of the edge, are 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.</p> </div> </div> <div> <div> <p>Case 1: Replies on Posts, weight += 1.0 × count(c)</p> </div> <div> <p>Case 2: Replies on Comments, weight += 0.5 × count(c1)</p> </div> </div> | | |
| IC 4 | desc. | <p>Given two Persons, find all (unweighted) shortest paths between these two Persons, in the subgraph induced by the knows relationship.</p> <p>Then, for each path calculate a weight. The nodes in the path are Persons, and the weight of a path is the sum of weights between every pair of consecutive Person nodes in the path.</p> <p>The weight for a pair of Persons is calculated based on their interactions:</p> <ul style="list-style-type: none"> • Every direct reply (by one of the Persons) to a Post (by the other Person) contributes 1.0. • Every direct reply (by one of the Persons) to a Comment (by the other Person) contributes 0.5. <p>Note that interactions are counted both ways (e.g. if Alice writes 2 Post replies and 1 Comment reply to Bob, while Bob writes 3 Post replies and 4 Comment replies to Alice, their interaction score is $2 \times 1.0 + 1 \times 0.5 + 3 \times 1.0 + 4 \times 0.5 = 7.5$).</p> <p>Return all the paths with shortest length, and their weights. Do not return any rows if there is no path between the two Persons.</p> | | |
| IC 5 | params | 1 | person1Id | ID |
| IC 6 | | 2 | person2Id | ID |
| IC 7 | result | 1 | personIdsInPath | [ID] |
| IC 8 | | 2 | pathWeight | 64-bit Float |
| IC 9 | sort | 1 | pathWeight | ↓ |
| IC 10 | | The order of paths with the same weight is unspecified | | |
| IC 11 | CPs | 3.3, 5.3, 7.2, 7.3, 7.5, 7.7, 8.1, 8.2, 8.3, 8.6 | | |
| IC 12 | relevance | <p>This query looks for a variable length path, starting at a given Person and finishing at an another given Person. This is a more complex query as it not only requires computing the path length, but returning it and computing a weight. To compute this weight one must look for smaller sub-queries with paths of length three, formed by the two Persons at each step, a Post and a Comment.</p> | | |
| IC 13 | | | | |
| IC 14 | | | | |