

## Interactive / complex / 6

|       |           |   |               |                |   |
|-------|-----------|---|---------------|----------------|---|
| IC 1  | query     | Interactive / complex / 6   |               |                |   |
| IC 2  | title     | Tag co-occurrence   |               |                |   |
| IC 3  | pattern   |  <pre> graph TD     person[person: Person] -- knows*1..2 --&gt; otherPerson[otherPerson: Person]     tag[tag: Tag] -- hasTag --&gt; Post[Post]     otherTag[otherTag: Tag] -- hasTag --&gt; Post     Post -- hasCreator --&gt; otherPerson     subgraph count         Post     end     </pre> <p>The diagram illustrates the query pattern. It starts with a <b>person: Person</b> entity (orange box) with a variable <code>id = \$personId</code>. This person is connected via a <code>knows*1..2</code> relationship to an <b>otherPerson: Person</b> entity (orange box). The <b>otherPerson</b> is connected via a <code>hasCreator</code> relationship to a <b>Post</b> entity (red box). The <b>Post</b> entity is also connected via <code>hasTag</code> relationships to two <b>Tag</b> entities: <b>tag: Tag</b> (pink box) with variable <code>name = \$tagName</code>, and <b>otherTag: Tag</b> (pink box) with variable <code>name ≠ \$tagName</code>. A <code>count</code> aggregation is shown over the <b>Post</b> entity.</p> |               |                |   |
| IC 6  | desc.     | Given a start Person and some Tag, find the other Tags that occur together with this Tag on Posts that were created by start Person's friends and friends of friends (excluding start Person). Return top 10 Tags, and the count of Posts that were created by these Persons, which contain both this Tag and the given Tag.  |               |                |   |
| IC 11 | params    | 1   | personId      | ID             |   |
| IC 12 |           | 2   | tagName       | Long String    |   |
| IC 13 | result    | 1   | otherTag.name | Long String    | R |
| IC 14 |           | 2   | postCount     | 32-bit Integer | A |
|       |           | Number of Posts that were created by friends and friends of friends, which have the Tag otherTag  |               |                |   |
|       | sort      | 1   | postCount     | ↓              |   |
|       |           | 2   | otherTag.name | ↑              |   |
|       | limit     | 10  |               |                |   |
|       | CPs       | 5.1, 8.2  |               |                |   |
|       | relevance | This query looks for paths of lengths three or four, starting from a given Person, moving to friends or friends of friends, then to Posts and finally ending at a given Tag.  |               |                |   |