Homework 10. Triplestore

You are given a sample file of triples about celebrities, collected by <u>Tobi Segaran</u>. Create a single table with 3 columns (subject, predicate, object). The code in SQLite could look like this:

```
.open celeb.db
CREATE TABLE celebrities ( subject TEXT, predicate TEXT, object TEXT);
.separator ","
.import celeb_triples.csv celebrities
```

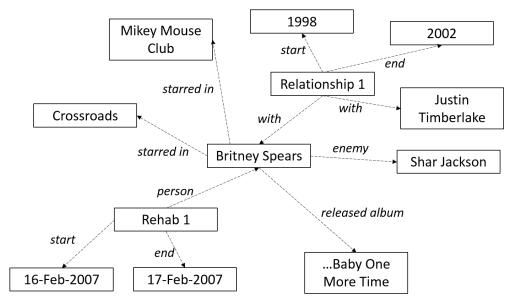


Figure 1 An example of a celebrity data expressed as a graph

- 1. [1 point] Think of a new predicate to represent fans. Add a few triples about stars of whom you are a fan.
- 2. [1 point]. What indexes are required in order to answer the following query: Find out whom your favorite stars have been dating. Create these indexes.
- 3. [2 points] Use standard SQL to answer this question. Use the results returned by intermediate views, each view computing a new list of tuples. The input for the query is a fan name. Do not forget that the name is just another attribute for the subject fan, which has its unique subject ID. This is in contrast with the stars where the name of a star is unique and is used as star identifier.

You can use SQLite to check your work.

Submit

- 1. Insertion statements for new fans. In the comments indicate what new predicates you used.
- 2. Index creation statements.
- 3. SQL code for answering the relationships query.

All the SQL code in a single file hw10.sql should be submitted through Markus no later than Thursday, Aug 4, 6 PM.