CSC343 Assignment 1 Solution

June 13, 2020

Warm Up

1. What does this integrity constraint mean? $\sigma_{follower=followed}Follows = \emptyset$

Means there is no result in a query where user follow himself/herself

2. Would it be a good idea to define the Follows relation like this? Follows()follower, followed, start)

Omitted for now

3. Can the database represent a single post that has multiple comments?

Yes.

Create two relations Comment(\underline{pid} , commenter, when, text) and Post(\underline{pid} , uid, when, location, caption). Set pid in comment to be the pid of Post.

Since primary key of Comment is pid, commenter, when, comments can have multiple entires with the same pid.

On the other hand, since pid in Post is the only primary key, it's value must be non-repeating.

Part 1

- 1. Rough Work:
 - 1. Find all users who liked a post