Shane Hauck

CS 345 Database Systems

Assignment 2

To create my own version of the university database from the textbook, after signing into the St Lawrence, I created a new database with the name "shauc19_university" using the command "*CREATE DATABASE shauc19_university;*". Once that was created, I then downloaded the DDL file from the Database System Concepts website which contained code to create the necessary tables. I then copy, pasted, and ran the various codes for each table. After all the tables were created, my next step was to insert the relations. I initially downloaded and used the smallRelationsInsertFile.sql file to figure out how to get the data imported. I learned that to import a sql script that is in a file you need to use the command "*\i FILE*", where FILE is the path of the sql script. The smallRelationsInsertFile.sql file deletes all previous data in the tables (at this point there was none) and then inserts the data to the proper relations. I then repeated this with the largeRelationsInsertFile.sql file where it deleted everything I had just added to the relations from the smallRelationsInsertFile.sql file and inserted the newer data accordingly. Then to very that the relations were correct and had the correct number of tuples, I used the command "*SELECT count(*) FROM relation*" for all the different relations. The majority of the relations had the correct value of tuples, but the takes, advisor, and student relations were slightly short. Takes had 29988 tuples where it needed 30000; advisor had 1999 tuples where it needed 2000; and student had 1999 tuples where it needed 2000. These shortcomings appear to have been as a result of a foreign-key constraint violation. The error was as follows, "*psql:C:/Users/hauck/Downloads/largeRelationsInsertFile.sql:33044: ERROR: insert or update on table "advisor" violates foreign key constraint "advisor_s_id_fkey" DETAIL: Key (s_id)=(24325) is not present in table "student".*"