Birla Institute of Technology & Science, Pilani, K. K. BIRLA Goa campus
Database Systems (CS F212) Second Semester 2019-2020
Lab-6 Exercise: Normalization and Views

Import the database db212_lab6. It has a relation IMDB for internet movie database with following constraints:

a. The Board of Film Certification has assigned a unique id to every actor, director and movie.
b. Every producer produces one movie.
c. A movie can have multiple directors.
d. Every director has a fixed fee irrespective of the movie he/she is directing.
e. Every movie can have multiple actors acting in it.
f. An actor's fee may vary with movies.

1. Alter the IMDB table to add producer column with constraint: “One producer can produce multiple movies”. Update the records accordingly.

2. Decompose this relation to the best normal form. Insert the records into the corresponding tables using select query.

(For following queries save the output of views in a text file)

3. Create a view titled MOVIE_DATED showing all movies released between 2000 and 2019 [both included].

4. Insert a record in ‘MOVIE_DATED’ view and check whether it is reflected in base table using select query. Similarly update a record in ‘MOVIE_DATED’ view and check the changes in original table. Similarly delete a record from view and observe in base table.

5. Create a view titled ‘STEVEN_ACTORS’ Listing all actors who worked in movies directed by Steven Spielberg.

6. Create a view ‘GENDER_DISPARITY’ displaying the number of females and males acting in each genre. [Display NULL if any field is 0]

7. Now, add the following data items to their respective tables.
(23, ‘Tom’ , ‘Cruise’, ‘M’, ‘Lead’, 75000,390, ‘War of The Worlds’,2005, ‘Action’,42, ‘Steven’, ‘Spielberg’, 100000) and notice the changes occuring in all the view tables. (‘MOVIE_DATED’ , ‘ACTOR_INCOME’, ‘KEANU_ACTION’ , ‘STEVEN_ACTORS’, ‘GENDER_DISPARITY’)

8. Repeat Q4 for other views and make observations. Are these DML query executed successfully? If not why?