Birla Institute of Technology & Science, Pilani, K. K. BIRLA Goa campus
Database Systems (CS F212)
Second Semester 2020-2021
Lab-1
Database Languages

Create a database contanining movies, their ratings and Critics using the following information. Decide the appropriate datatype for each attribute.

Q1) Create a database called 'db212BITSScreen'. In this database, create the following 3 tables:

1. **Movies:** The table has the following attributes:
    a. MovieID (Primary Key)
    b. MovieName (Cannot be NULL)
    c. ReleaseYear(Cannot be NULL)
    d. Duration(in minutes)
    e. Language
    f. ReleasedDate
    g. ReleaseCountry

2. **Critics:** The table has the following attributes:
    a. CriticID (Primary Key)
    b. Name

3. **Ratings:** The table has the following attributes:
    a. MovieID
    b. CriticID
    (MovieID and CriticID form the composite primary key).
    c. Rating (Out of 10, up to 1 decimal place)
    d. NumOfRatings

Q2) See the description of above table by executing desc <table name> command. Justify 'Not Null' constraint automatically applied on primary key attribute.

Q3) Make the following modifications to the database:

1. Change the name of column 'NumOfRatings' to 'NumOfReviews' in the Ratings table.
2. Change the type of Name column in Critics table to NOT NULL
3. Change Rating column in the Ratings table to a decimal type with precision 6 and scale as 2. If you had already made it a floating point value, simply change the precision and scale. (If you don't know the terms precision and scale in this context, check mySQL documentation for decimal datatype).

Q4) **try mysql>** show create table Movies;
Explain the output

Q5) Insert the following entries into the corresponding tables:

Movies:

1) 125, Good Will Hunting, 1997,126, English, 1998-06-03, UK
2) 126, Back To The Future, 1985, 116, English, 1985-12-04, UK
3) 127, Seven Samurai, 1954, 207, Japanese, 1954-04-26, JP
4) 128, Jurassic Park, 1993, 128, English, 1993-06--09, US
5) 129, Uri: The Surgical Strike, 2019, 138, Hindi, 2019-1-11, IND

Critics:

1) 500, Judith Crist
2) 501, Roger Ebert
3) 502, Andrew Sarris
4) 503, Omar Qureshi

Ratings:

1) 125, 502, 8.4, 26375
2) 127, 500, 7.9, 202778
3) 129, 501, 8.1, 13091
4) 129, 503, 8.6, 81328

Write SQL query to do the following:

Q6) Find the year in which Seven Samurai was released

Q7) Write a query to find names of all movies with ID 125, 128 and 129

Q8) Find all movies in the list which were released before 1990

Q9) Display the distinct countries in ReleaseCountry from the Movies table

Q10) List all movies which have a rating greater than 8 by any critic(The list shouldn't have any repititions).

Q11) Increase the Duration of all movies in the table by 60 minutes. Display the modified table to view changes

Q12) Write a query to display names of all critics and movies in a single

list(Hint: Use Union)

Q13) Display using select query (do not update) the Duration and name of the movie if duration is increased by 50% on all albums. (Hint: arithmetic operation in select query)

Q14) Add an Age index in Movies table with 0 default

Q15) Update all the records in Movies table with Age as difference current year and the release year. Try to get the year from the system instead if manual entry. Write only one query. //Hint: use CURDATE()

Q16) Display today's date. What is the difference between sysdate() and curdate()?

Q17) Export the database into a .sql file. Find the path of exported .sql find and email the .sql file it to yourself.

Q18) Drop all the three tables. Drop the database. Test using show tables or use db212BITSStream.

Q19) Import the database into a new database called 'db212BITSTest'. Test by show database.

Q20) Are the tablenames, database name, keywords in the query like insert, alter, case sensitve?