

DBMS Lab Assignment 1:

ER Diagram, SQL queries

1. Design a Database of Movies. This database talks about - actors, directors and movies. Actors star in movies. Director directs movies. Actors and Directors have a firstname, a lastname, and a date of birth (DOB). Movies have a title, a year, and a genre (comedy, cartoon, thriller etc).

A. Design an E-R diagram to represent this data

B. Design tables to represent this data.

C. Write relational algebra statements to answer the following queries:

i. List all the films in which an actor with firstname "Sharukh" and lastname "Khan" acted

ii. List all movies for which "Sharukh" "Khan" was an actor as well as director

iii. List all "thrillers" released after the year 2000 in which "Sharukh" "Khan" acted

iv. List all Co-actors of "Sharukh" "Khan" who are younger than him by 10 years

v. Who is the Director in whose movie "Sharukh" "Khan" acted most number of times?

D. Create the tables in question B in SQL. Insert few example records into the tables.

Write and execute the relational algebra queries above in SQL.

Time: 1 week