SET 1

**Cinema (cid, cname, city, owner\_name)**

**Film (fid, title, director name, genre, budget, rating)**

**showing (fid, cid)**

**a) Create the tables and enter at least 5 sets of records in each table created that will help in retrieving data from your database.**

**b) Write optimized queries for the following. No duplicates should be printed in any of the answers. Output should display at least one record set.**

**1. List the name, city and the number of different films showing at each cinema/theatre; results should be returned in the ascending alphabetical order of city and name.**

**2. Find the titles and names of director/s of the blockbuster films running at every cinema/theatre, that has made an entry into the 100 - crore club.**

**3. Find the owners of theatres showing "romance" but not "comedy".**

**4. Out of all films showing in Mumbai', retrieve the film ID, title, and director of the films whose budget is more than the cheapest film showing in "Rajkot".**

**Answer .**

**CREATE TABLE:**

CREATE TABLE Cinema (

cid NUMBER PRIMARY KEY,

cname VARCHAR2(100),

city VARCHAR2(100),

owner\_name VARCHAR2(100)

);

CREATE TABLE Film (

fid NUMBER PRIMARY KEY,

title VARCHAR2(100),

director\_name VARCHAR2(100),

genre VARCHAR2(100),

budget NUMBER(12 , 2),

rating NUMBER(3 , 1)

);

CREATE TABLE showing (

fid NUMBER REFERENCES Film(fid) ON DELETE CASCADE,

cid NUMBER REFERENCES Cinema(cid) ON DELETE CASCADE

);

**Insert Table**

**Cinema:**

**INSERT INTO Cinema VALUES (1 ,’CinA’ , ’Kolkata’, ’A’);**

**INSERT INTO Cinema VALUES (2, ’CinB’, ’Rajkot’, ’B’);**

**INSERT INTO Cinema VALUES (3,’CinC’,’Rajkot’,’C’);**

**INSERT INTO Cinema VALUES (4 ,’CinD’ ,’Mumbai’ ,’D’);**

**INSERT INTO Cinema VALUES (5 ,’CinE’ ,’Mumbai’,’E’);**

**Film:**

**INSERT INTO Film VALUES (101 ,’Dhoom’,’DA’,’action’,800000000.00,7.5);**

**INSERT INTO Film VALUES (102,’Avatar’,’DB’ ,’romance’,1000000500.00 ,9.2);**

**INSERT INTO Film VALUES (103 ,’Jaws’ ,’DC’ ,’sci-fi’ ,780000000.00,8.5);**

**INSERT INTO Film VALUES (104 ,’Comedy of Errors’,’DD’,’comedy’,1000000000.00,8.0);**

**INSERT INTO Film VALUES (105,’Cinderella’,’DE’,’romance’,850005000.00 ,7.5);**

**Showing:**

**INSERT INTO Showing VALUES (101 , 1);**

**INSERT INTO Showing VALUES (102 , 1);**

**INSERT INTO Showing VALUES (102 , 2);**

**INSERT INTO Showing VALUES (103 ,2);**

**INSERT INTO Showing VALUES (103 , 3);**

**INSERT INTO Showing VALUES (104 , 3);**

**INSERT INTO Showing VALUES (104 , 4);**

**INSERT INTO Showing VALUES (105 , 5);**

**Query 1 : List the name, city and the number of different films showing at each cinema/theatre; results should be returned in the ascending alphabetical order of city and name.**

**// Here providing the C.city and C.cname must be used as attributes used in SELECT without used in aggregate functions must be there in GROUP BY too.**

**SELECT C.cname ,C.city, count(DISTINCT S.fid ) AS NUMFILMS**

**FROM Cinema C JOIN Showing S ON C.cid = S.cid**

**GROUP BY C.city , C.cname**

**ORDER BY C.city, C.cname;**

**Query 2: Find the titles and names of director/s of the blockbuster films running at every cinema/theatre, -- that has made an entry into the 100 - crore club.**

**SELECT F.title , F.director\_name FROM**

**Film F JOIN Showing S ON F.fid = S.fid**

**JOIN Cinema C ON S.cid = C.cid**

**WHERE F.budget > 1000000000.00 OR F.budget = 1000000000.00**

**GROUP BY F.title , F.director\_name;**

**Query 3: Find the owners of theatres showing "romance" but not "comedy".**

**SELECT owner\_name FROM**

**Cinema C JOIN Showing S ON C.cid = S.cid**

**JOIN Film F ON S.fid = F.fid**

**WHERE F.genre = ’romance’**

**AND C.cid NOT IN (**

**SELECT C.cid FROM Cinema C**

**JOIN Showing S ON C.cid = S.cid**

**JOIN Film F ON S.fid = F.fid**

**WHERE F.genre = ’comedy’**

**)**

**QUERY 4: Out of all films showing in Mumbai, retrieve the film ID, title, and director of the films whose -- budget is more than the cheapest film showing in "Rajkot".**

**SELECT F.fid ,F.title ,F.director\_name FROM**

**Film F JOIN Showing S ON F.fid = S.fid**

**JOIN Cinema C ON S.cid = C.cid WHERE C.city = ’Mumbai’ AND**

**F.budget > (**

**SELECT min(F.budget) FROM**

**Film F JOIN Showing S ON F.fid = S.fid**

**JOIN Cinema C ON S.cid = C.cid**

**WHERE C.city = ’Rajkot’**

**)**