**HOMEWORK2**

Homework 2 will be on the database tables same as homework 1.You can use the same old script and start working on that. You have to use the following code for creating the table which is same as homework1.

DROP TABLES IF EXISTS Authors,Publishers,Titles,Title\_Authors,Royalties;

CREATE TABLE Authors

(

au\_id CHAR(3) NOT NULL,

au\_fname VARCHAR(15) NOT NULL,

au\_lname VARCHAR(15) NOT NULL,

phone VARCHAR(12) ,

address VARCHAR(20) ,

city VARCHAR(15) ,

state CHAR(2) ,

zip CHAR(5) ,

CONSTRAINT pk\_Authors PRIMARY KEY (au\_id)

);

CREATE TABLE Publishers

(

pub\_id CHAR(3) NOT NULL,

pub\_name VARCHAR(20) NOT NULL,

city VARCHAR(15) NOT NULL,

state CHAR(2) ,

country VARCHAR(15) NOT NULL,

CONSTRAINT pk\_Publishers PRIMARY KEY (pub\_id)

);

CREATE TABLE Titles

(

title\_id CHAR(3) NOT NULL,

title\_name VARCHAR(40) NOT NULL,

type VARCHAR(10) ,

pub\_id CHAR(3) NOT NULL,

pages INTEGER ,

price DECIMAL(5,2) ,

sales INTEGER ,

pubdate DATE ,

contract SMALLINT NOT NULL,

CONSTRAINT pk\_Titles PRIMARY KEY (title\_id)

);

CREATE TABLE Title\_Authors

(

title\_id CHAR(3) NOT NULL,

au\_id CHAR(3) NOT NULL,

au\_order SMALLINT NOT NULL,

royalty\_share DECIMAL(5,2) NOT NULL,

CONSTRAINT pk\_Title\_Authors PRIMARY KEY (title\_id, au\_id)

);

CREATE TABLE Royalties

(

title\_id CHAR(3) NOT NULL,

advance DECIMAL(9,2) ,

royalty\_rate DECIMAL(5,2) ,

CONSTRAINT pk\_Royalties PRIMARY KEY (title\_id)

);

INSERT INTO Authors VALUES('A01','Sarah','Buchman','718-496-7223',

'75 West 205 St','Bronx','NY','10468');

INSERT INTO Authors VALUES('A02','Wendy','Heydemark','303-986-7020',

'2922 Baseline Rd','Boulder','CO','80303');

INSERT INTO Authors VALUES('A03','Hallie','Hull','415-549-4278',

'3800 Waldo Ave, #14F','San Francisco','CA','94123');

INSERT INTO Authors VALUES('A04','Klee','Hull','415-549-4278',

'3800 Waldo Ave, #14F','San Francisco','CA','94123');

INSERT INTO Authors VALUES('A05','Christian','Kells','212-771-4680',

'114 Horatio St','New York','NY','10014');

INSERT INTO Authors VALUES('A06','','Kellsey','650-836-7128',

'390 Serra Mall','Palo Alto','CA','94305');

INSERT INTO Authors VALUES('A07','Paddy','O''Furniture','941-925-0752',

'1442 Main St','Sarasota','FL','34236');

INSERT INTO Publishers VALUES('P01','Abatis Publishers','New York','NY','USA');

INSERT INTO Publishers VALUES('P02','Core Dump Books','San Francisco','CA','USA');

INSERT INTO Publishers VALUES('P03','Schadenfreude Press','Hamburg',NULL,'Germany');

INSERT INTO Publishers VALUES('P04','Tenterhooks Press','Berkeley','CA','USA');

INSERT INTO Publishers VALUES('P05','PTR Press','Los Angeles','CA','USA');

INSERT INTO Titles VALUES('T01','1977!','history','P01',

107,21.99,566,'2000-08-01',1);

INSERT INTO Titles VALUES('T02','200 Years of German Humor','history','P03',

14,19.95,9566,'1998-04-01',1);

INSERT INTO Titles VALUES('T03','Ask Your System Administrator','computer','P02',

1226,39.95,25667,'2000-09-01',1);

INSERT INTO Titles VALUES('T04','But I Did It Unconsciously','psychology','P04',

510,12.99,13001,'1999-05-31',1);

INSERT INTO Titles VALUES('T05','Exchange of Platitudes','psychology','P04',

201,6.95,201440,'2001-01-01',1);

INSERT INTO Titles VALUES('T06','How About Never?','biography','P01',

473,19.95,11320,'2000-07-31',1);

INSERT INTO Titles VALUES('T07','I Blame My Mother','biography','P03',

333,23.95,1500200,'1999-10-01',1);

INSERT INTO Titles VALUES('T08','Just Wait Until After School','children','P04',

86,10.00,4095,'2001-06-01',1);

INSERT INTO Titles VALUES('T09','Kiss My Boo-Boo','children','P04',

22,13.95,5000,'2002-05-31',1);

INSERT INTO Titles VALUES('T10','Not Without My Faberge Egg','biography','P01',

NULL,NULL,NULL,NULL,0);

INSERT INTO Titles VALUES('T11','Perhaps It''s a Glandular Problem','psychology','P04',

826,7.99,94123,'2000-11-30',1);

INSERT INTO Titles VALUES('T12','Spontaneous, Not Annoying','biography','P01',

507,12.99,100001,'2000-08-31',1);

INSERT INTO Titles VALUES('T13','What Are The Civilian Applications?','history','P03',

802,29.99,10467,'1999-05-31',1);

INSERT INTO Title\_Authors VALUES('T01','A01',1,1.0);

INSERT INTO Title\_Authors VALUES('T02','A01',1,1.0);

INSERT INTO Title\_Authors VALUES('T03','A05',1,1.0);

INSERT INTO Title\_Authors VALUES('T04','A03',1,0.6);

INSERT INTO Title\_Authors VALUES('T04','A04',2,0.4);

INSERT INTO Title\_Authors VALUES('T05','A04',1,1.0);

INSERT INTO Title\_Authors VALUES('T06','A02',1,1.0);

INSERT INTO Title\_Authors VALUES('T07','A02',1,0.5);

INSERT INTO Title\_Authors VALUES('T07','A04',2,0.5);

INSERT INTO Title\_Authors VALUES('T08','A06',1,1.0);

INSERT INTO Title\_Authors VALUES('T09','A06',1,1.0);

INSERT INTO Title\_Authors VALUES('T10','A02',1,1.0);

INSERT INTO Title\_Authors VALUES('T11','A03',2,0.3);

INSERT INTO Title\_Authors VALUES('T11','A04',3,0.3);

INSERT INTO Title\_Authors VALUES('T11','A06',1,0.4);

INSERT INTO Title\_Authors VALUES('T12','A02',1,1.0);

INSERT INTO Title\_Authors VALUES('T13','A01',1,1.0);

INSERT INTO Royalties VALUES('T01',10000,0.05);

INSERT INTO Royalties VALUES('T02',1000,0.06);

INSERT INTO Royalties VALUES('T03',15000,0.07);

INSERT INTO Royalties VALUES('T04',20000,0.08);

INSERT INTO Royalties VALUES('T05',100000,0.09);

INSERT INTO Royalties VALUES('T06',20000,0.08);

INSERT INTO Royalties VALUES('T07',1000000,0.11);

INSERT INTO Royalties VALUES('T08',0,0.04);

INSERT INTO Royalties VALUES('T09',0,0.05);

INSERT INTO Royalties VALUES('T10',NULL,NULL);

INSERT INTO Royalties VALUES('T11',100000,0.07);

INSERT INTO Royalties VALUES('T12',50000,0.09);

INSERT INTO Royalties VALUES('T13',20000,0.06);

show tables;

After creating the table as above you have to execute the following queries for homework 2.

1. List the title\_name and book type of the books that are published earlier than all biography books
2. List the title\_name and book type of the books published by 'Abatis Publishers'
3. Find the name(s) of the publisher(s) that have not published any book
4. Find the name(s) of the publisher(s) who have published the computer book.
5. Find the name(s) of the author(s) that have authored more than one books.
6. Find the name(s) of the publisher(s) who published the least expensive book.
7. Find the name(s) of the author(s) who wrote the book with the greatest number of pages.
8. Report the names of all authors and the title\_name of the books (if any) they have authored.
9. Find the name of the publishers who have not published any book. (use outer join)
10. For each book title, list the tite\_name, the publisher's name and the author's name
11. Find the name of publisher that published the book with the greatest royalty rate
12. Find the title name of the most expensive computer book, the name of its author and the publisher's name.
13. List the books published in the last 16 years. Note that your query should remain correct in the future, which means the number 2000 AND 2016 should not appear anywhere in the query.
14. List the author names in the form {first initial}{period}{space}{last name}, e.g. K. Hull. Order the results first by last name, then by first name. Only list those authors who have both a first name and a last name in the database.
15. List the following information of all authors: the first name, the position of the first occurrence of 'e' within the first name, the last name, the position of the first occurrence of 'ma' within the last name. Use proper column names.
16. List the name(s) of the publisher(s) that published the book with the shortest title name.
17. For each author, list the author id, area code, and the phone number without the area code.