**LAB PROGRAM 7(BOOK DATABASE) NAME:TARUN SRIRAM DAMMU**

**USN:1BM19CS171**

**QUERIES**

|  |  |
| --- | --- |
| **create database bookdb;** |  |
|  | **use bookdb;** |
|  |  |
|  | **create table publisher (** |
|  | **name varchar (20) primary key,** |
|  | **phone integer,** |
|  | **address varchar (20)** |
|  | **);** |
|  | **desc publisher;** |
|  |  |
|  | **create table book (** |
|  | **book\_id integer primary key,** |
|  | **title varchar (20),** |
|  | **pub\_year varchar (20),** |
|  | **publisher\_name varchar (20),** |
|  | **foreign key (publisher\_name) references publisher (name) on delete cascade** |
|  | **);** |
|  | **desc book;** |
|  |  |
|  | **create table book\_authors (** |
|  | **author\_name varchar (20),** |
|  | **book\_id integer,** |
|  | **foreign key (book\_id) references book (book\_id) on delete cascade,** |
|  | **primary key (book\_id, author\_name)** |
|  | **);** |
|  | **desc book\_authors;** |
|  |  |
|  | **create table library\_branch (** |
|  | **branch\_id integer primary key,** |
|  | **branch\_name varchar (50),** |
|  | **address varchar (50)** |
|  | **);** |
|  | **desc library\_branch;** |
|  |  |
|  | **create table book\_copies (** |
|  | **no\_of\_copies integer,** |
|  | **book\_id integer,** |
|  | **branch\_id integer,** |
|  | **foreign key (book\_id) references book (book\_id) on delete cascade,** |
|  | **foreign key (branch\_id) references library\_branch (branch\_id) on delete cascade,** |
|  | **primary key (book\_id, branch\_id)** |
|  | **);** |
|  | **desc book\_copies;** |
|  |  |
|  | **create table card (** |
|  | **card\_no integer primary key** |
|  | **);** |
|  | **desc card;** |
|  | **create table book\_lending (** |
|  | **date\_out date,** |
|  | **due\_date date,** |
|  | **book\_id integer,** |
|  | **branch\_id integer,** |
|  | **card\_no integer,** |
|  | **foreign key (book\_id) references book (book\_id) on delete cascade,** |
|  | **foreign key (branch\_id) references library\_branch (branch\_id) on delete cascade,** |
|  | **foreign key (card\_no) references card (card\_no) on delete cascade,** |
|  | **primary key (book\_id, branch\_id, card\_no)** |
|  | **);** |
|  | **desc book\_lending;** |
|  |  |
|  | **insert into publisher values ('mcgraw-hill', 99890, 'bangalore');** |
|  | **insert into publisher values ('pearson', 98890, 'newdelhi');** |
|  | **insert into publisher values ('random house', 74556, 'hydrabad');** |
|  | **insert into publisher values ('hachette livre', 897086, 'chenai');** |
|  | **insert into publisher values ('grupo planeta', 77561, 'bangalore');** |
|  |  |
|  | **select \* from publisher;** |
|  |  |
|  | **insert into book values (1,'dbms','01-2017', 'mcgraw-hill');** |
|  | **insert into book values (2,'adbms','06-2016', 'mcgraw-hill');** |
|  | **insert into book values (3,'cn','09-2016', 'pearson');** |
|  | **insert into book values (4,'cg','09-2015', 'grupo planeta');** |
|  | **insert into book values (5,'os','05-2016', 'pearson');** |
|  | **select \* from book;** |
|  | **insert into book\_authors values ('navathe', 1);** |
|  | **insert into book\_authors values ('navathe', 2);** |
|  | **insert into book\_authors values ('tanenbaum', 3);** |
|  | **insert into book\_authors values ('edward angel', 4);** |
|  | **insert into book\_authors values ('galvin', 5);** |
|  | **select \* from book\_authors;** |
|  | **insert into library\_branch values (10,'rr nagar','bangalore');** |
|  | **insert into library\_branch values (11,'rnsit','bangalore');** |
|  | **insert into library\_branch values (12,'rajaji nagar', 'bangalore');** |
|  | **insert into library\_branch values (13,'nitte','mangalore');** |
|  | **insert into library\_branch values (14,'manipal','udupi');** |
|  | **select \* from library\_branch;** |
|  | **insert into book\_copies values (10, 1, 10);** |
|  | **insert into book\_copies values (5, 1, 11);** |
|  | **insert into book\_copies values (2, 2, 12);** |
|  | **insert into book\_copies values (5, 2, 13);** |
|  | **insert into book\_copies values (7, 3, 14);** |
|  | **insert into book\_copies values (1, 5, 10);** |
|  | **insert into book\_copies values (3, 4, 11);** |
|  | **select \* from book\_copies;** |
|  | **insert into card values (100);** |
|  | **insert into card values (101);** |
|  | **insert into card values (102);** |
|  | **insert into card values (103);** |
|  | **insert into card values (104);** |
|  | **select \* from card;** |
|  |  |
|  | **insert into book\_lending values ('01-01-17','01-06-17', 1, 10, 101);** |
|  | **insert into book\_lending values ('11-01-17','11-03-17', 3, 14, 101);** |
|  | **insert into book\_lending values ('21-02-17','21-04-17', 2, 13, 101);** |
|  | **insert into book\_lending values ('15-03-17','15-07-17', 4, 11, 101);** |
|  | **insert into book\_lending values ('12-08-17','12-08-17', 1, 11, 104);** |
|  | **select \* from book\_lending;** |
|  |  |
|  | **-- Query 1** |
|  |  |
|  | **select b.book\_id, b.title, b.pub\_year, b.publisher\_name, bc.no\_of\_copies, ba.author\_name, lb.branch\_name from book b, book\_authors ba,** |
|  | **library\_branch lb, book\_copies bc where b.book\_id = ba.book\_id and b.book\_id = bc.book\_id and lb.branch\_id = bc.branch\_id;** |
|  |  |
|  | **-- Query 2** |
|  |  |
|  | **select card\_no from book\_lending where year(date\_out) >17 and month(date\_out)<7 group by card\_no having count(card\_no) >2 ;** |
|  |  |
|  | **-- Query 3** |
|  |  |
|  | **delete from book where book\_id = 3;** |
|  | **select \* from book;** |
|  | **select \* from book\_authors;** |
|  | **select \* from book\_copies;** |
|  | **select \* from book\_lending;** |
|  |  |
|  | **-- Query 4** |
|  | **select \* from book order by substring(pub\_year, 4, 4);** |
|  | **-- select b1.book\_id, b1.title, b1.pub\_year** |
|  | **-- from book b1** |
|  | **-- inner join book b2 on substring(b1.pub\_year, 4, 4) = substring(b2.pub\_year, 4, 4) and b1.book\_id <> b2.book\_id;** |
|  |  |
|  | **create view q4\_view as select pub\_year from book;** |
|  | **select \* from q4\_view;** |
|  |  |
|  | **-- Query 5** |
|  |  |
|  | **create view q5\_view as select b.book\_id, b.title, bc.no\_of\_copies from book b,** |
|  | **book\_copies bc where b.book\_id = bc.book\_id;** |
|  | **select \* from q5\_view;** |