create database p1;

use p1;

create table publisher(name varchar(20) primary key, phone bigint, address varchar(20));

create table book(book\_id integer primary key, title varchar(20), pub\_year date,pub\_name varchar(20) not null, foreign key(pub\_name) references publisher (name) on delete cascade);

create table book\_authors(author\_name varchar(20), book\_id integer not null, foreign key(book\_id) references book(book\_id) on delete cascade, primary key(book\_id, author\_name));

create table library\_branch(branch\_id integer primary key, branch\_name varchar(50),address varchar(50));

create table book\_copies(no\_of\_copies integer, book\_id integer not null, foreign key(book\_id) references book(book\_id) on delete cascade, branch\_id integer not null, foreign key(branch\_id) references library\_branch(branch\_id) on delete cascade, primary key(book\_id, branch\_id));

create table card(card\_no integer primary key);

create table book\_lending(date\_out date, due\_date date, book\_id integer, foreign key (book\_id) references book (book\_id) on delete cascade, branch\_id integer, foreign key (branch\_id) references library\_branch (branch\_id) on delete cascade, card\_no integer, foreign key (card\_no) references card (card\_no) on delete cascade, primary key (book\_id, branch\_id, card\_no));

insert into publisher values ('MC', 9980324323, 'New Delhi');

insert into publisher values ('PS', 9989887789, 'Hyderabad');

insert into publisher values('HL', 8355389034, 'Bangalore');

insert into publisher values ('RH', 8934345590, 'Chennai');

insert into publisher values('GP', 8945989054, 'Bangalore');

select \* from publisher;

insert into book values (200, 'EMT', '2000-01-01', 'MC');

insert into book values (201, 'CN', '2000-02-01', 'PS');

insert into book values (202, 'DBMS', '1999-12-01', 'RH');

insert into book values (203, 'UP', '1998-12-07', 'PS');

insert into book values (204, 'ATC', '1999-07-17', 'MC');

select \* from book;

insert into book\_authors values ('BALAJI',200);

insert into book\_authors values ('JOHN' ,201);

insert into book\_authors values ('BALAJI',202);

insert into book\_authors values ('ANGEL',203);

insert into book\_authors values ('GALVIN',204);

select \* from book\_authors;

insert into library\_branch values (50, 'Begur', 'Bengaluru');

insert into library\_branch values (51, 'HSR Layout', 'Bengaluru');

insert into library\_branch values (52, 'Hosa Road', 'Bengaluru');

insert into library\_branch values (53, 'Electronic City', 'Bengaluru');

insert into library\_branch values (54, 'Madiwala', 'Bengaluru');

insert into library\_branch values (55, 'Water Tank', 'Bengaluru');

select \* from library\_branch;

insert into book\_copies values (10,200,50);

insert into book\_copies values (15,201,51);

insert into book\_copies values (20,202,52);

insert into book\_copies values (21,200,51);

insert into book\_copies values (30,201,50);

insert into book\_copies values (13,202,53);

select \* from book\_copies;

insert into card values(300);

insert into card values(301);

insert into card values(302);

insert into card values(303);

insert into card values(304);

insert into card values(305);

select \* from card;

insert into book\_lending values('2017-01-10','2017-06-10', 200,50,300);

insert into book\_lending values('2017-02-12','2017-07-10', 201,51,300);

insert into book\_lending values('2017-03-10','2017-05-10', 202,52,301);

insert into book\_lending values('2017-06-10','2017-10-10', 203,53,301);

insert into book\_lending values('2017-01-16','2017-06-17', 200,51,300);

insert into book\_lending values('2017-01-17','2017-06-17', 202,52,300);

select \* from book\_lending;

select b.book\_id,b.title,b.pub\_name,a.author\_name,c.no\_of\_copies,l.branch\_id from book b,book\_authors a,book\_copies c,library\_branch l where b.book\_id = a.book\_id and b.book\_id=c.book\_id and l.branch\_id=c.branch\_id;

select card\_no from book\_lending where date\_out between'2017-01-01' and '2017-06-01' group by card\_no having count(\*)>3;

delete from book where book\_id = 201;

select \* from book;

select \* from book\_authors;

select \* from book\_copies;

select \* from book\_lending;

create view v\_publication as select pub\_year from book;

select \* from v\_publication;

create view vbooks as select b.book\_id,b.title,c.no\_of\_copies from book b,book\_copies c, library\_branch l where b.book\_id=c.book\_id and c.branch\_id=l.branch\_id;

select \* from vbooks;