DBMS LAB REPORT 1

Mallika Prasad

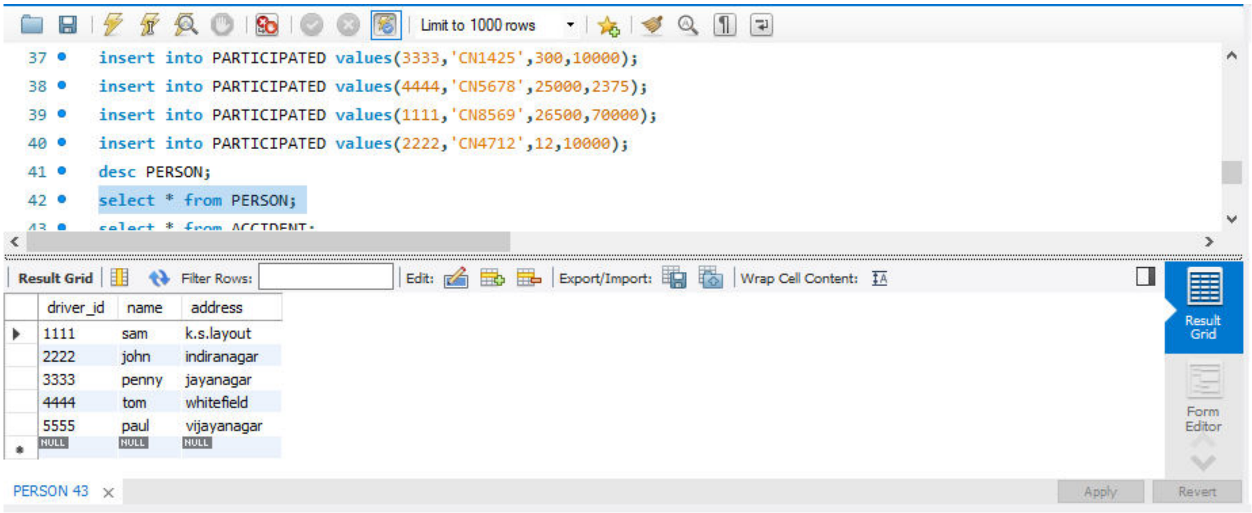
1BM19CS081

Lab 1

INSURANCE database

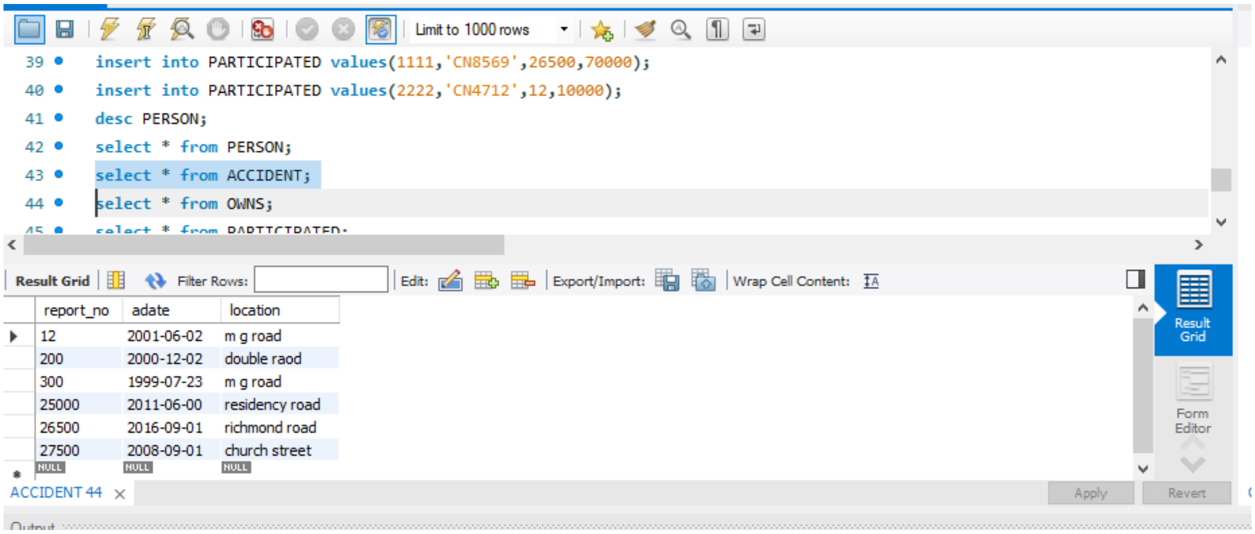
```
Create
database
mallika;
          show databases;
          use mallika;
          show tables;
          create table PERSON(driver_id varchar(10), name varchar(20), address varchar(15), primary
          key(driver_id));
          create table CAR(regno varchar(10), model varchar(20), year date, primary key(regno));
          create table ACCIDENT(report_no int, adate date, location varchar(15), primary key(report_no));
          create table OWNS(driver_id varchar(10), regno varchar(10), primary key(driver_id,regno), foreign
          key(driver_id) references PERSON(driver_id) on delete cascade, foreign key(regno) references
          CAR(regno) on delete cascade);
          create table PARTICIPATED(driver_id varchar(10), regno varchar(10), report_no int, damage_amt
          float, foreign key(driver_id,regno) references OWNS(driver_id,regno) on delete cascade, foreign
          key(report_no) references ACCIDENT(report_no)on delete cascade);
          desc PERSON;
          desc CAR;
          desc ACCIDENT;
          desc OWNS;
          desc PARTICIPATED;
          insert into PERSON values(1111,'sam','k.s.layout');
          insert into PERSON values(2222,'john','indiranagar');
          insert into PERSON values(3333,'penny','jayanagar');
          insert into PERSON values(4444,'tom','whitefield');
          insert into PERSON values(5555,'paul','vijayanagar');
          insert into CAR values('CN5247','maruthi','2000-01-14');
          insert into CAR values('CN8569','fordicon','2000-04-25');
          insert into CAR values('CN4712','zen','1999-05-06');
          insert into CAR values('CN1425','maruthi','2002-11-19');
          insert into CAR values('CN5678','indica','2002-06-20');
          insert into ACCIDENT values(12,'02-06-02','m g road');
          insert into ACCIDENT values(200,'00-12-02','double raod');
          insert into ACCIDENT values(300,'99-07-23','m g road');
          insert into ACCIDENT values(25000,'11-06-00','residency road');
          insert into ACCIDENT values(26500,'01-09-01','richmond road');
          insert into OWNS values(1111,'CN5247');
insert into OWNS values(1111,'CN8569');
insert into OWNS values(2222,'CN4712');
insert into OWNS values(3333,'CN1425');
insert into OWNS values(4444,'CN5678');
insert into PARTICIPATED values(1111,'CN5247',12,20000);
insert into PARTICIPATED values(2222,'CN4712',200,500);
insert into PARTICIPATED values(3333,'CN1425',300,10000);
insert into PARTICIPATED values(4444,'CN5678',25000,2375);
insert into PARTICIPATED values(1111,'CN8569',26500,70000);
insert into PARTICIPATED values(2222,'CN4712',12,10000);
desc PERSON;
select * from PERSON;
select * from ACCIDENT;
select * from OWNS;
select * from PARTICIPATED;
update PARTICIPATED set damage_amt=25000 where report_no=12 and regno='CN5247';
insert into ACCIDENT values(27500,'08-09-01','church street');
select count(*) from accident where adate like '2008-__-__';
select count(a.report_no) from ACCIDENT a, PARTICIPATED p, CAR c where a.report_no=p.report_no AND
p.regno=c.regno and c.model='maruthi';
```

OUTPUT



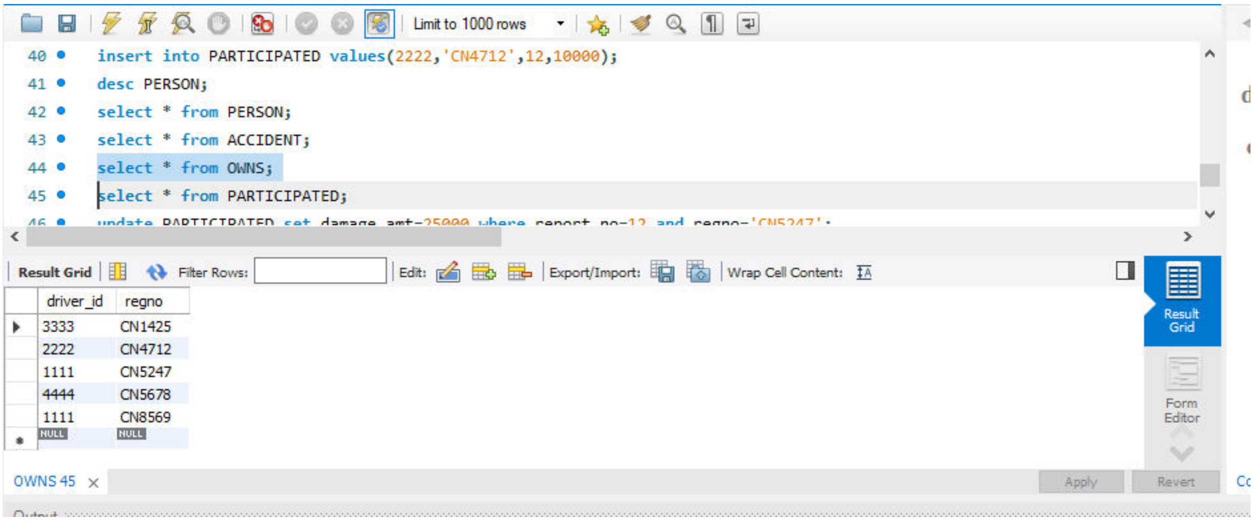
```
insert into PARTICIPATED values(3333,'CN1425',300,10000);
insert into PARTICIPATED values(4444,'CN5678',25000,2375);
insert into PARTICIPATED values(1111,'CN8569',26500,70000);
insert into PARTICIPATED values(2222,'CN4712',12,10000);
desc PERSON;
select * from PERSON;
select * from ACCIDENT;
```

driver_id	name	address
1111	sam	k.s.layout
2222	john	indiranagar
3333	penny	jayanagar
4444	tom	whitefield
5555	paul	vijayanagar
NULL	NULL	NULL



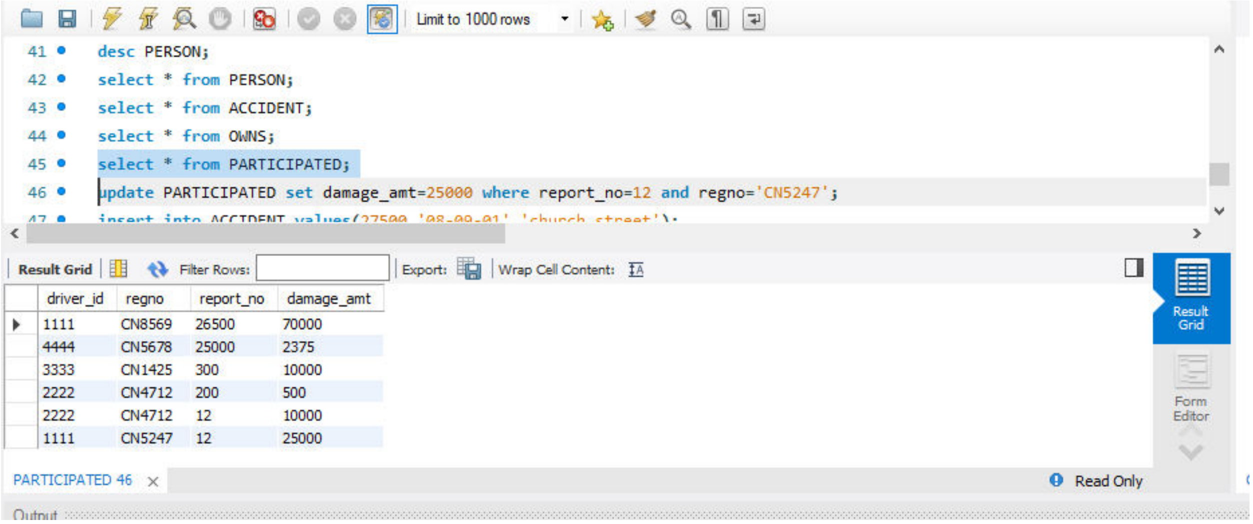
```sql
insert into PARTICIPATED values(1111,'CN8569',26500,70000);
insert into PARTICIPATED values(2222,'CN4712',12,10000);
desc PERSON;
select * from PERSON;
select * from ACCIDENT;
select * from OWNS;
select * from PARTICIPATED;
```

report_no	adate	location
12	2001-06-02	m g road
200	2000-12-02	double raod
300	1999-07-23	m g road
25000	2011-06-00	residency road
26500	2016-09-01	richmond road
27500	2008-09-01	church street
NULL	NULL	NULL



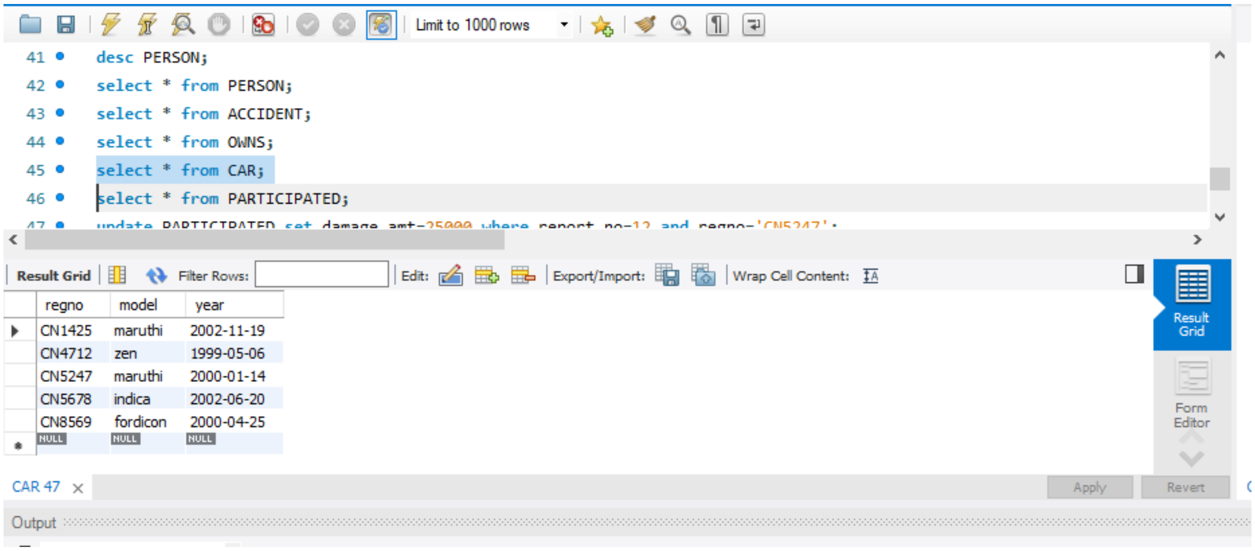
```sql
insert into PARTICIPATED values(2222,'CN4712',12,10000);
desc PERSON;
select * from PERSON;
select * from ACCIDENT;
select * from OWNS;
select * from PARTICIPATED;
update PARTICIPATED set damage_amt=25000 where report_no=12 and regno='CN5247';
```

driver_id	regno
3333	CN1425
2222	CN4712
1111	CN5247
4444	CN5678
1111	CN8569
NULL	NULL



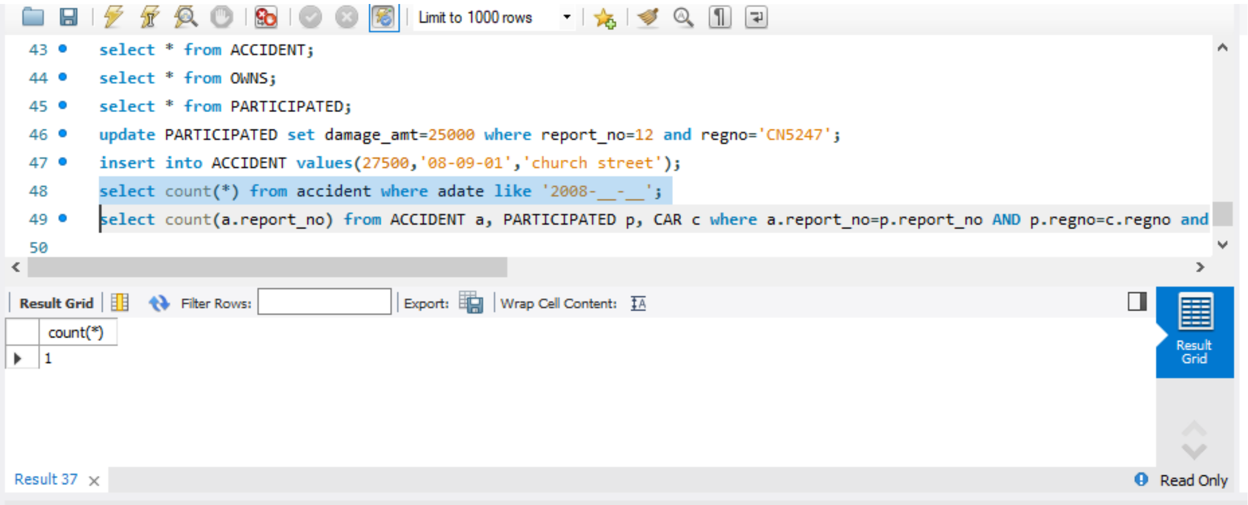
```sql
desc PERSON;
select * from PERSON;
select * from ACCIDENT;
select * from OWNS;
select * from PARTICIPATED;
update PARTICIPATED set damage_amt=25000 where report_no=12 and regno='CN5247';
insert into ACCIDENT values(27500,'08-09-01','church street');
```

driver_id	regno	report_no	damage_amt
1111	CN8569	26500	70000
4444	CN5678	25000	2375
3333	CN1425	300	10000
2222	CN4712	200	500
2222	CN4712	12	10000
1111	CN5247	12	25000



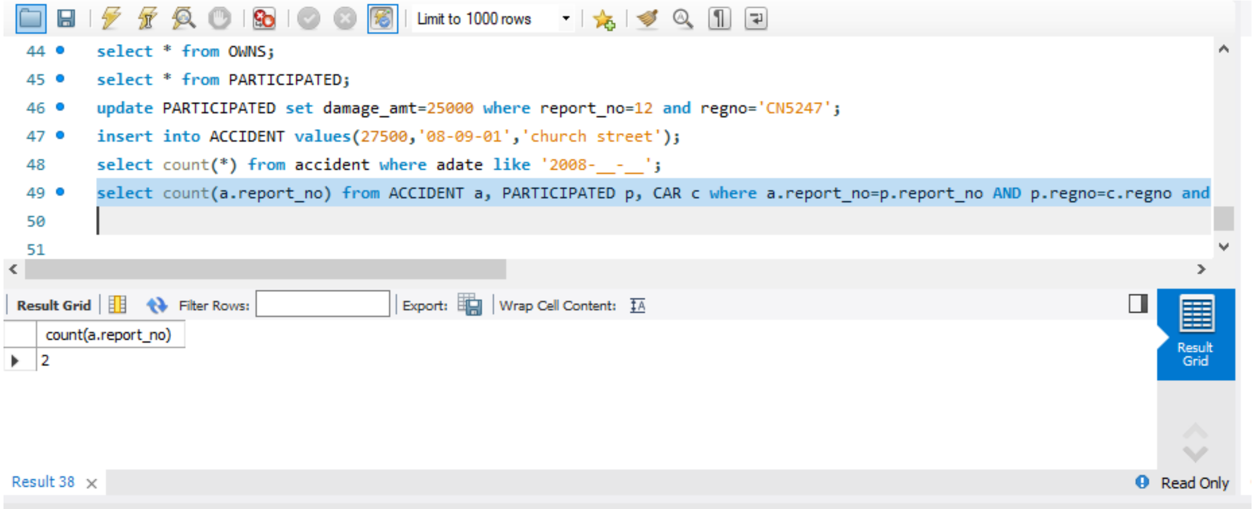
```sql
desc PERSON;
select * from PERSON;
select * from ACCIDENT;
select * from OWNS;
select * from CAR;
select * from PARTICIPATED;
update PARTICIPATED set damage_amt=25000 where report_no=12 and regno='CN5247';
```

```
regno    model     year
CN1425   maruthi   2002-11-19
CN4712   zen       1999-05-06
CN5247   maruthi   2000-01-14
CN5678   indica    2002-06-20
CN8569   fordicon  2000-04-25
NULL     NULL      NULL
```



```sql
select * from ACCIDENT;
select * from OWNS;
select * from PARTICIPATED;
update PARTICIPATED set damage_amt=25000 where report_no=12 and regno='CN5247';
insert into ACCIDENT values(27500,'08-09-01','church street');
select count(*) from accident where adate like '2008-__-__';
select count(a.report_no) from ACCIDENT a, PARTICIPATED p, CAR c where a.report_no=p.report_no AND p.regno=c.regno and
```

```
count(*)
1
```



```sql
select * from OWNS;
select * from PARTICIPATED;
update PARTICIPATED set damage_amt=25000 where report_no=12 and regno='CN5247';
insert into ACCIDENT values(27500,'08-09-01','church street');
select count(*) from accident where adate like '2008-__-__';
select count(a.report_no) from ACCIDENT a, PARTICIPATED p, CAR c where a.report_no=p.report_no AND p.regno=c.regno and
```

```
count(a.report_no)
2
```

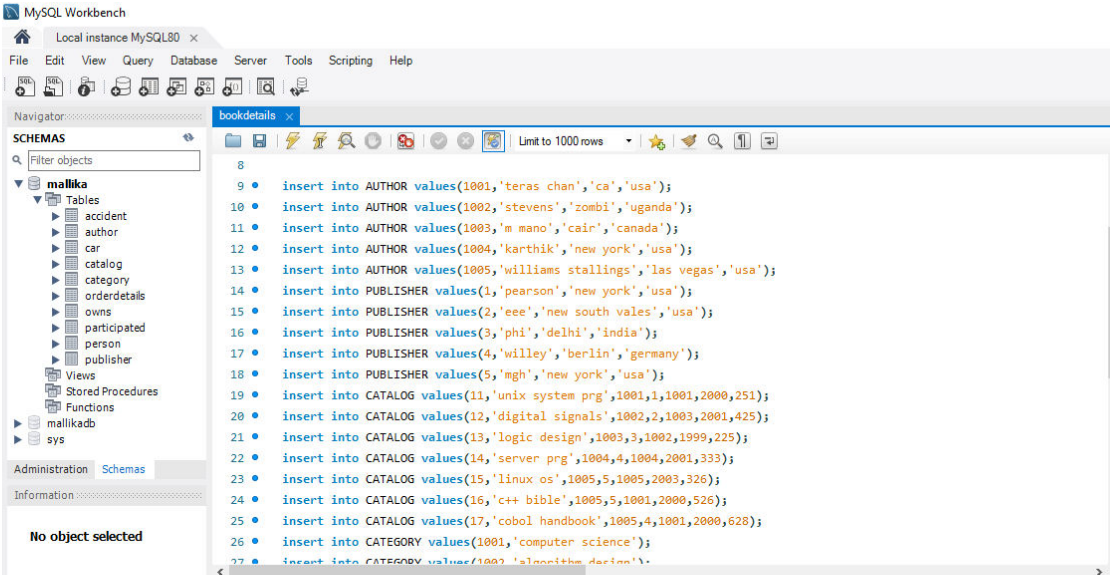
LAB 2

BOOKDETAILS database

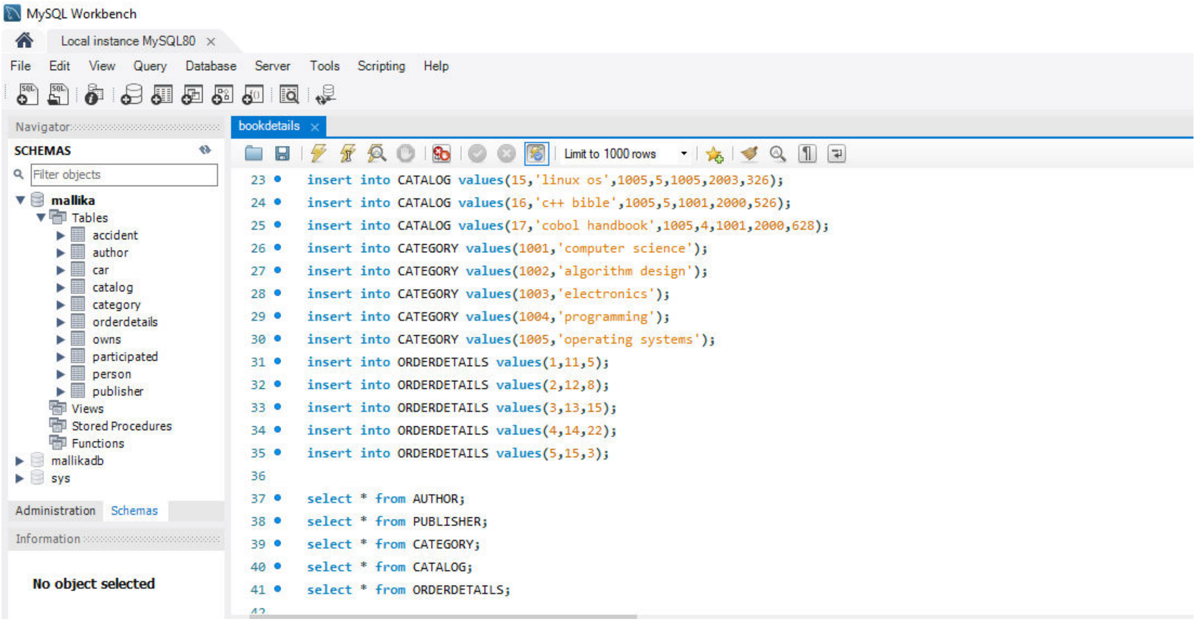
```
use
mallika;
           show tables;
           create table AUTHOR(authorid int, name varchar(30), city varchar(30), country varchar(30), primary
           key(authorid));
           create table PUBLISHER(publisherid int,name varchar(30),city varchar(30), country varchar(30), primary
           key(publisherid));
           create table CATALOG(bookid int,title varchar(30), authorid int,publisherid int ,categoryid int, year
           int, price int, primary key(bookid), foreign key(publisherid) references PUBLISHER(publisherid),
           foreign key(categoryid) references CATEGORY(categoryid));
           create table CATEGORY(categoryid int,description varchar(30), primary key(categoryid));
           create table ORDERDETAILS(orderno int,bookid int,quantity int, primary key(orderno), foreign
           key(bookid) references CATALOG(bookid));
           insert into AUTHOR values(1001,'teras chan','ca','usa');
           insert into AUTHOR values(1002,'stevens','zombi','uganda');
           insert into AUTHOR values(1003,'m mano','cair','canada');
           insert into AUTHOR values(1004,'karthik','new york','usa');
           insert into AUTHOR values(1005,'williams stallings','las vegas','usa');
           insert into PUBLISHER values(1,'pearson','new york','usa');
           insert into PUBLISHER values(2,'eee','new south vales','usa');
           insert into PUBLISHER values(3,'phi','delhi','india');
           insert into PUBLISHER values(4,'willey','berlin','germany');
           insert into PUBLISHER values(5,'mgh','new york','usa');
           insert into CATALOG values(11,'unix system prg',1001,1,1001,2000,251);
           insert into CATALOG values(12,'digital signals',1002,2,1003,2001,425);
           insert into CATALOG values(13,'logic design',1003,3,1002,1999,225);
           insert into CATALOG values(14,'server prg',1004,4,1004,2001,333);
           insert into CATALOG values(15,'linux os',1005,5,1005,2003,326);
           insert into CATALOG values(16,'c++ bible',1005,5,1001,2000,526);
           insert into CATALOG values(17,'cobol handbook',1005,4,1001,2000,628);
           insert into CATEGORY values(1001,'computer science');
           insert into CATEGORY values(1002,'algorithm design');
           insert into CATEGORY values(1003,'electronics');
           insert into CATEGORY values(1004,'programming');
           insert into CATEGORY values(1005,'operating systems');
           insert into ORDERDETAILS values(1,11,5);
           insert into ORDERDETAILS values(2,12,8);
           insert into ORDERDETAILS values(3,13,15);
           insert into ORDERDETAILS values(4,14,22);
           insert into ORDERDETAILS values(5,15,3);
           select * from AUTHOR;
           select * from PUBLISHER;
           select * from CATEGORY;
           select * from CATALOG;
           select * from ORDERDETAILS;
           select a.authorid,a.name,a.city,a.country,c.price from AUTHOR a,CATALOG c where a.authorid=c.authorid
```

```
AND c.year>2000 group by c.authorid HAVING count(c.authorid)>=2;
select a.name from AUTHOR a, CATALOG c, ORDERDETAILS o where a.authorid=c.authorid and
c.bookid=o.bookid and o.quantity=(select max(quantity) from ORDERDETAILS);
update CATALOG c set c.price=1.1*price where c.publisherid=(select publisherid from PUBLISHER where
name='willey');
select p.name, c.price from PUBLISHER p, CATALOG c where p.publisherid=c.publisherid and
p.name='willey';
```

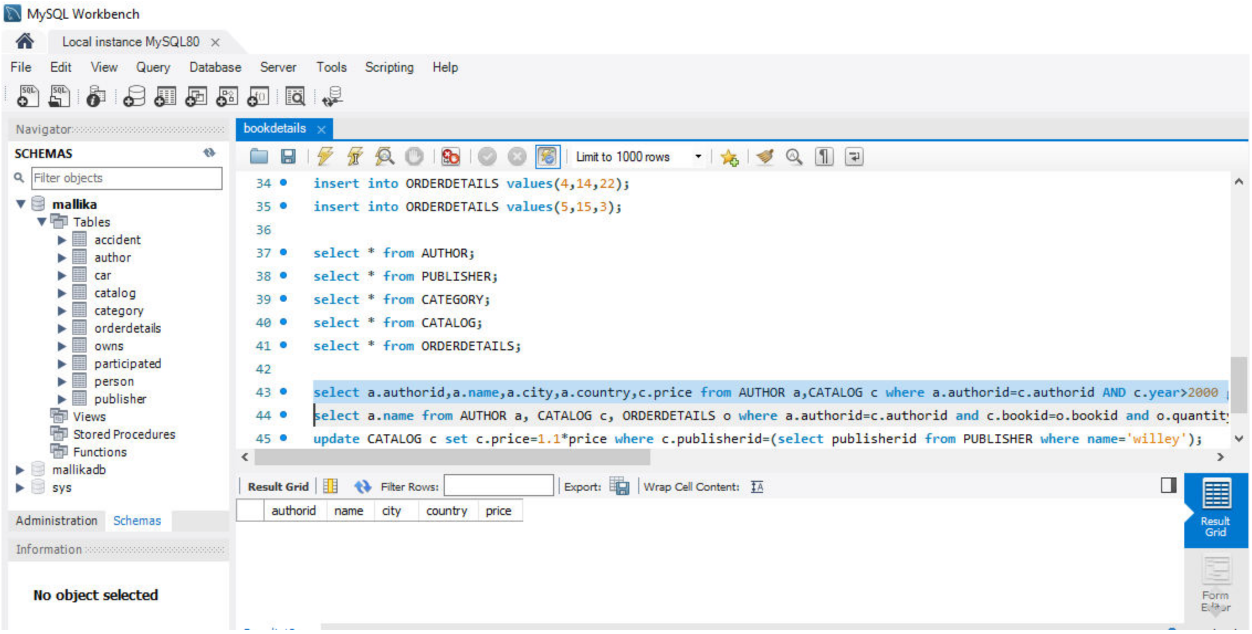
Output



```

insert into AUTHOR values(1001,'teras chan','ca','usa');
insert into AUTHOR values(1002,'stevens','zombi','uganda');
insert into AUTHOR values(1003,'m mano','cair','canada');
insert into AUTHOR values(1004,'karthik','new york','usa');
insert into AUTHOR values(1005,'williams stallings','las vegas','usa');
insert into PUBLISHER values(1,'pearson','new york','usa');
insert into PUBLISHER values(2,'eee','new south vales','usa');
insert into PUBLISHER values(3,'phi','delhi','india');
insert into PUBLISHER values(4,'willey','berlin','germany');
insert into PUBLISHER values(5,'mgh','new york','usa');
insert into CATALOG values(11,'unix system prg',1001,1,1001,2000,251);
insert into CATALOG values(12,'digital signals',1002,2,1003,2001,425);
insert into CATALOG values(13,'logic design',1003,3,1002,1999,225);
insert into CATALOG values(14,'server prg',1004,4,1004,2001,333);
insert into CATALOG values(15,'linux os',1005,5,1005,2003,326);
insert into CATALOG values(16,'c++ bible',1005,5,1001,2000,526);
insert into CATALOG values(17,'cobol handbook',1005,4,1001,2000,628);
insert into CATEGORY values(1001,'computer science');
insert into CATEGORY values(1002,'algorithm design');
```

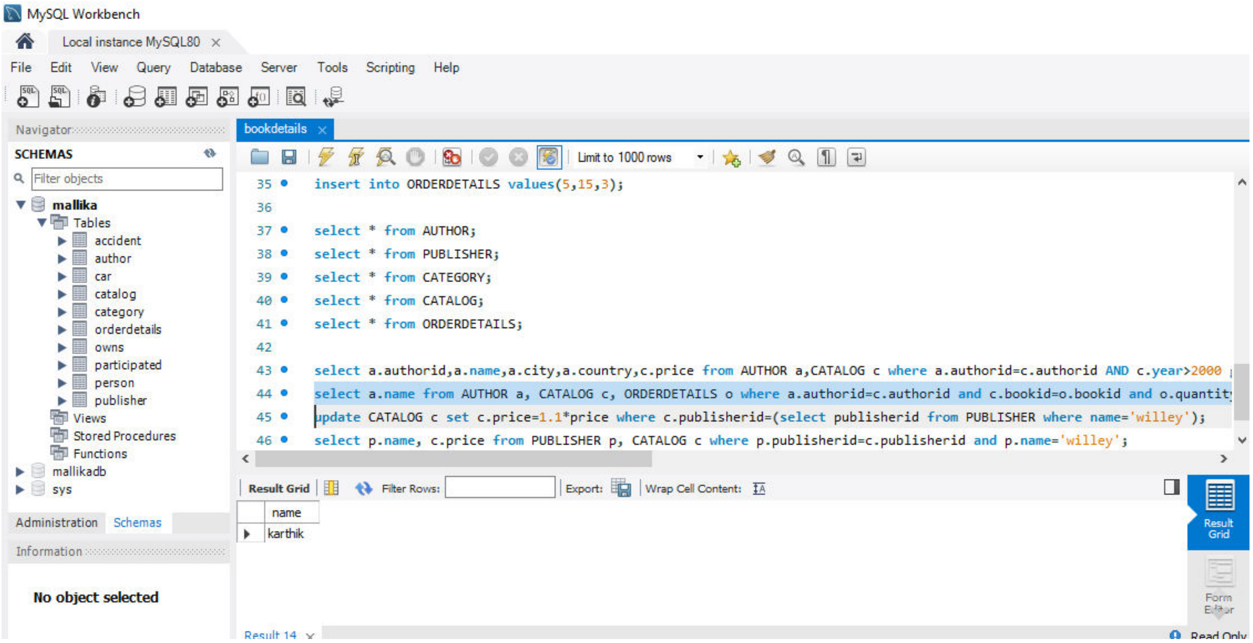


```
insert into CATALOG values(15,'linux os',1005,5,1005,2003,326);
insert into CATALOG values(16,'c++ bible',1005,5,1001,2000,526);
insert into CATALOG values(17,'cobol handbook',1005,4,1001,2000,628);
insert into CATEGORY values(1001,'computer science');
insert into CATEGORY values(1002,'algorithm design');
insert into CATEGORY values(1003,'electronics');
insert into CATEGORY values(1004,'programming');
insert into CATEGORY values(1005,'operating systems');
insert into ORDERDETAILS values(1,11,5);
insert into ORDERDETAILS values(2,12,8);
insert into ORDERDETAILS values(3,13,15);
insert into ORDERDETAILS values(4,14,22);
insert into ORDERDETAILS values(5,15,3);

select * from AUTHOR;
select * from PUBLISHER;
select * from CATEGORY;
select * from CATALOG;
select * from ORDERDETAILS;
```



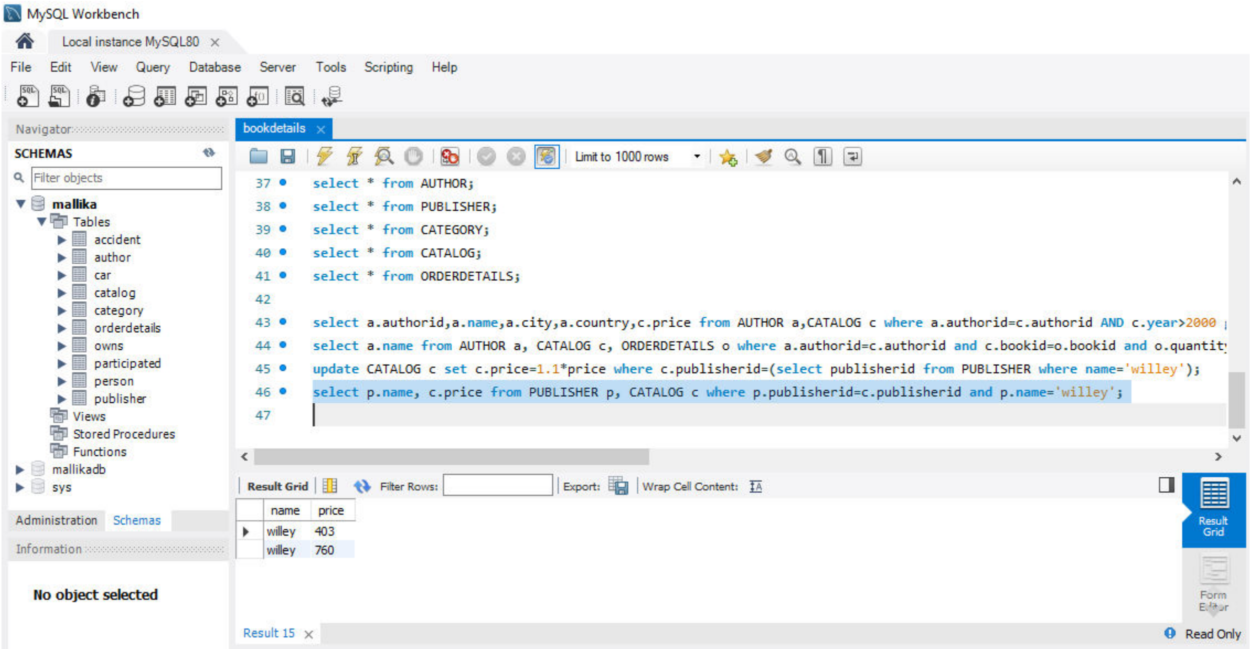
```
insert into ORDERDETAILS values(4,14,22);
insert into ORDERDETAILS values(5,15,3);

select * from AUTHOR;
select * from PUBLISHER;
select * from CATEGORY;
select * from CATALOG;
select * from ORDERDETAILS;

select a.authorid,a.name,a.city,a.country,c.price from AUTHOR a,CATALOG c where a.authorid=c.authorid AND c.year>2000
select a.name from AUTHOR a, CATALOG c, ORDERDETAILS o where a.authorid=c.authorid and c.bookid=o.bookid and o.quantit
update CATALOG c set c.price=1.1*price where c.publisherid=(select publisherid from PUBLISHER where name='willey');
```

authorid	name	city	country	price



```
insert into ORDERDETAILS values(5,15,3);

select * from AUTHOR;
select * from PUBLISHER;
select * from CATEGORY;
select * from CATALOG;
select * from ORDERDETAILS;

select a.authorid,a.name,a.city,a.country,c.price from AUTHOR a,CATALOG c where a.authorid=c.authorid AND c.year>2000
select a.name from AUTHOR a, CATALOG c, ORDERDETAILS o where a.authorid=c.authorid and c.bookid=o.bookid and o.quantit
update CATALOG c set c.price=1.1*price where c.publisherid=(select publisherid from PUBLISHER where name='willey');
select p.name, c.price from PUBLISHER p, CATALOG c where p.publisherid=c.publisherid and p.name='willey';
```

name
karthik



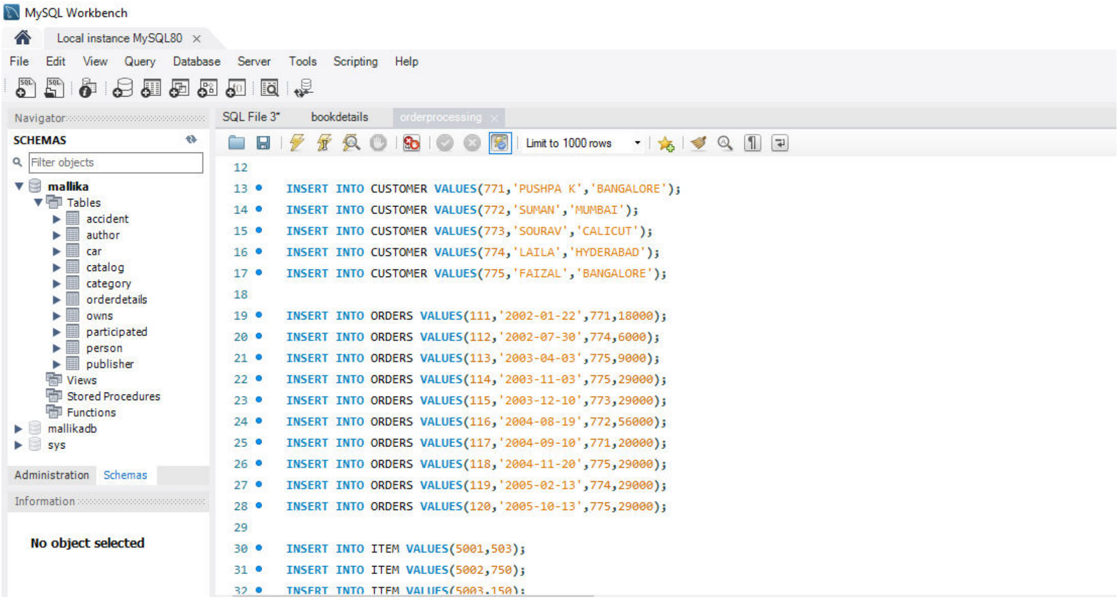
```
select * from AUTHOR;
select * from PUBLISHER;
select * from CATEGORY;
select * from CATALOG;
select * from ORDERDETAILS;

select a.authorid,a.name,a.city,a.country,c.price from AUTHOR a,CATALOG c where a.authorid=c.authorid AND c.year>2000
select a.name from AUTHOR a, CATALOG c, ORDERDETAILS o where a.authorid=c.authorid and c.bookid=o.bookid and o.quantity
update CATALOG c set c.price=1.1*price where c.publisherid=(select publisherid from PUBLISHER where name='willey');
select p.name, c.price from PUBLISHER p, CATALOG c where p.publisherid=c.publisherid and p.name='willey';
```

name	price
willey	403
willey	760

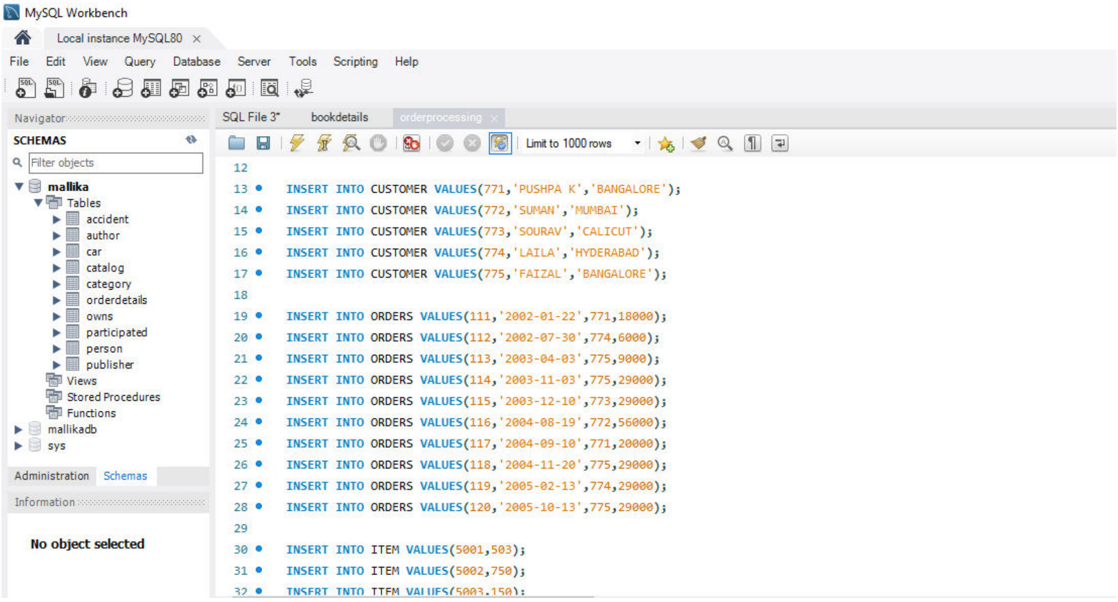
LAB 3

```
use
mallika;
            create table CUSTOMER(custno int, cname varchar(30), city varchar(30), primary key(custno));
            create table ORDERS(orderno int,odate date,custno int,ordamt int, primary key(orderno), foreign
            key(custno) references CUSTOMER(custno));
            create table ITEM(itemno int,unitprice int, primary key(itemno));
            create table ORDERITEM(orderno int,itemno int, qty int, foreign key(orderno) references
            ORDERS(orderno) ON DELETE SET NULL ON UPDATE CASCADE, foreign key(itemno) references ITEM(itemno) ON
            DELETE SET NULL ON UPDATE CASCADE);
            create table WAREHOUSE(warehouseno int,city varchar(30), primary key(warehouseno));
            create table SHIPMENT(orderno int,warehouseno int,shipdate date, foreign key(orderno) references
            ORDERS(orderno), foreign key(warehouseno) references WAREHOUSE(warehouseno));
            INSERT INTO CUSTOMER VALUES(771,'PUSHPA K','BANGALORE');
            INSERT INTO CUSTOMER VALUES(772,'SUMAN','MUMBAI');
            INSERT INTO CUSTOMER VALUES(773,'SOURAV','CALICUT');
            INSERT INTO CUSTOMER VALUES(774,'LAILA','HYDERABAD');
            INSERT INTO CUSTOMER VALUES(775,'FAIZAL','BANGALORE');
            INSERT INTO ORDERS VALUES(111,'2002-01-22',771,18000);
            INSERT INTO ORDERS VALUES(112,'2002-07-30',774,6000);
            INSERT INTO ORDERS VALUES(113,'2003-04-03',775,9000);
            INSERT INTO ORDERS VALUES(114,'2003-11-03',775,29000);
            INSERT INTO ORDERS VALUES(115,'2003-12-10',773,29000);
            INSERT INTO ORDERS VALUES(116,'2004-08-19',772,56000);
            INSERT INTO ORDERS VALUES(117,'2004-09-10',771,20000);
            INSERT INTO ORDERS VALUES(118,'2004-11-20',775,29000);
            INSERT INTO ORDERS VALUES(119,'2005-02-13',774,29000);
            INSERT INTO ORDERS VALUES(120,'2005-10-13',775,29000);
            INSERT INTO ITEM VALUES(5001,503);
INSERT INTO ITEM VALUES(5002,750);
INSERT INTO ITEM VALUES(5003,150);
INSERT INTO ITEM VALUES(5004,600);
INSERT INTO ITEM VALUES(5005,890);
INSERT INTO ORDERITEM VALUES(111,5001,50);
INSERT INTO ORDERITEM VALUES(112,5003,20);
INSERT INTO ORDERITEM VALUES(113,5002,50);
INSERT INTO ORDERITEM VALUES(114,5005,60);
INSERT INTO ORDERITEM VALUES(115,5004,90);
INSERT INTO ORDERITEM VALUES(116,5001,10);
INSERT INTO ORDERITEM VALUES(117,5003,80);
INSERT INTO ORDERITEM VALUES(118,5005,50);
INSERT INTO ORDERITEM VALUES(119,5002,10);
INSERT INTO ORDERITEM VALUES(120,5004,45);
INSERT INTO WAREHOUSE VALUES(1,'DELHI');
INSERT INTO WAREHOUSE VALUES(2,'BOMBAY');
INSERT INTO WAREHOUSE VALUES(3,'CHENNAI');
INSERT INTO WAREHOUSE VALUES(4,'BANGALORE');
INSERT INTO WAREHOUSE VALUES(5,'BANGALORE');
INSERT INTO WAREHOUSE VALUES(6,'DELHI');
INSERT INTO WAREHOUSE VALUES(7,'BOMBAY');
INSERT INTO WAREHOUSE VALUES(8,'CHENNAI');
INSERT INTO WAREHOUSE VALUES(9,'DELHI');
INSERT INTO WAREHOUSE VALUES(10,'BANGALORE');
INSERT INTO SHIPMENT VALUES(111,1,'2002-02-10');
INSERT INTO SHIPMENT VALUES(112,5,'2002-09-10');
INSERT INTO SHIPMENT VALUES(113,8,'2003-02-10');
INSERT INTO SHIPMENT VALUES(114,3,'2003-12-10');
INSERT INTO SHIPMENT VALUES(115,9,'2004-01-19');
INSERT INTO SHIPMENT VALUES(116,1,'2004-09-20');
INSERT INTO SHIPMENT VALUES(117,5,'2004-09-10');
INSERT INTO SHIPMENT VALUES(118,7,'2004-11-30');
INSERT INTO SHIPMENT VALUES(119,7,'2005-04-30');
INSERT INTO SHIPMENT VALUES(120,6,'2005-12-21');
select c.cname,count(o.orderno),avg(o.ordamt) from CUSTOMER c, ORDERS o where c.custno=o.custno group
by o.custno;
select s.orderno from SHIPMENT s, WAREHOUSE w where s.warehouseno=w.warehouseno and
w.city='bangalore';
delete from ITEM i where i.itemno=5001;
select * from ITEM;
```

OUTPUT



```
INSERT INTO CUSTOMER VALUES(771,'PUSHPA K','BANGALORE');
INSERT INTO CUSTOMER VALUES(772,'SUMAN','MUMBAI');
INSERT INTO CUSTOMER VALUES(773,'SOURAV','CALICUT');
INSERT INTO CUSTOMER VALUES(774,'LAILA','HYDERABAD');
INSERT INTO CUSTOMER VALUES(775,'FAIZAL','BANGALORE');

INSERT INTO ORDERS VALUES(111,'2002-01-22',771,18000);
INSERT INTO ORDERS VALUES(112,'2002-07-30',774,6000);
INSERT INTO ORDERS VALUES(113,'2003-04-03',775,9000);
INSERT INTO ORDERS VALUES(114,'2003-11-03',775,29000);
INSERT INTO ORDERS VALUES(115,'2003-12-10',773,29000);
INSERT INTO ORDERS VALUES(116,'2004-08-19',772,56000);
INSERT INTO ORDERS VALUES(117,'2004-09-10',771,20000);
INSERT INTO ORDERS VALUES(118,'2004-11-20',775,29000);
INSERT INTO ORDERS VALUES(119,'2005-02-13',774,29000);
INSERT INTO ORDERS VALUES(120,'2005-10-13',775,29000);

INSERT INTO ITEM VALUES(5001,503);
INSERT INTO ITEM VALUES(5002,750);
INSERT INTO ITEM VALUES(5003,150);
```



```
INSERT INTO CUSTOMER VALUES(771,'PUSHPA K','BANGALORE');
INSERT INTO CUSTOMER VALUES(772,'SUMAN','MUMBAI');
INSERT INTO CUSTOMER VALUES(773,'SOURAV','CALICUT');
INSERT INTO CUSTOMER VALUES(774,'LAILA','HYDERABAD');
INSERT INTO CUSTOMER VALUES(775,'FAIZAL','BANGALORE');

INSERT INTO ORDERS VALUES(111,'2002-01-22',771,18000);
INSERT INTO ORDERS VALUES(112,'2002-07-30',774,6000);
INSERT INTO ORDERS VALUES(113,'2003-04-03',775,9000);
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INSERT INTO ORDERS VALUES(117,'2004-09-10',771,20000);
INSERT INTO ORDERS VALUES(118,'2004-11-20',775,29000);
INSERT INTO ORDERS VALUES(119,'2005-02-13',774,29000);
INSERT INTO ORDERS VALUES(120,'2005-10-13',775,29000);

INSERT INTO ITEM VALUES(5001,503);
INSERT INTO ITEM VALUES(5002,750);
INSERT INTO ITEM VALUES(5003,150);
```
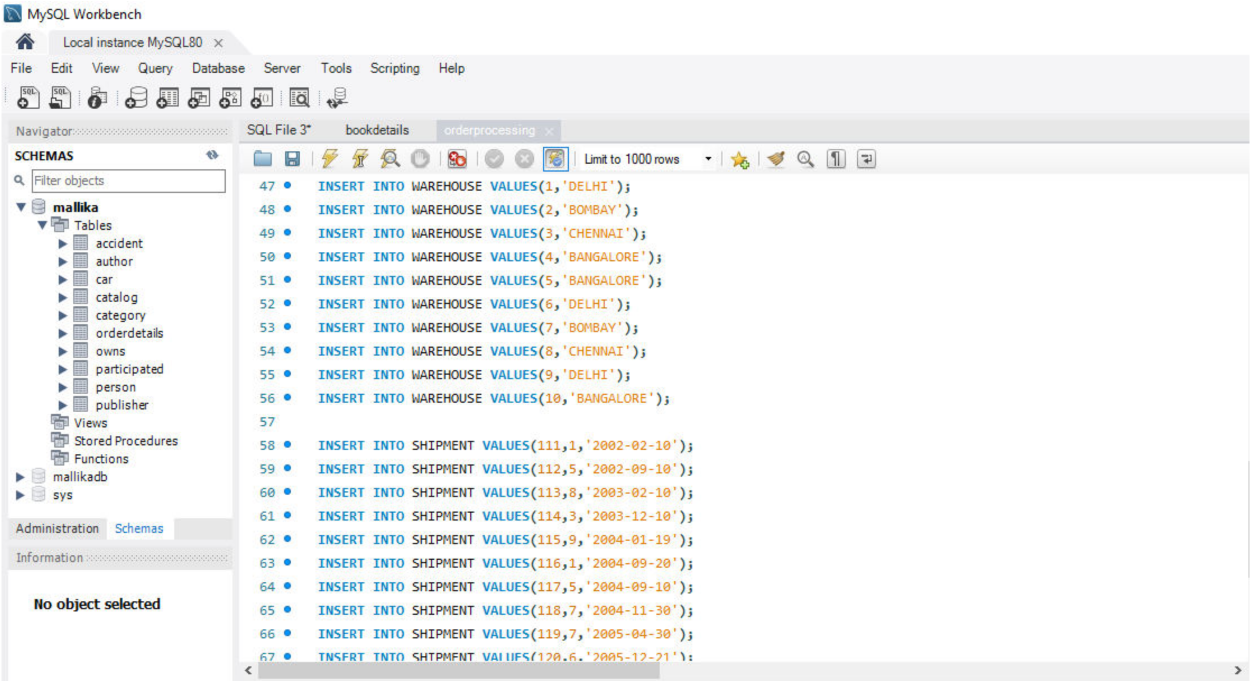
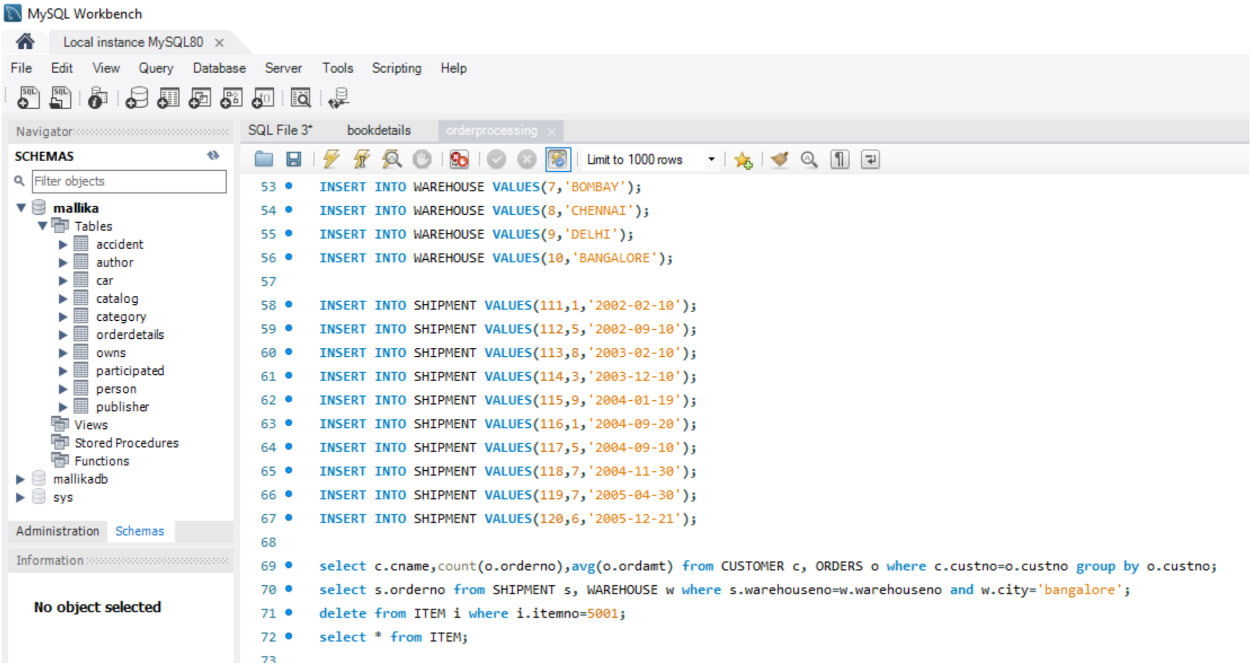
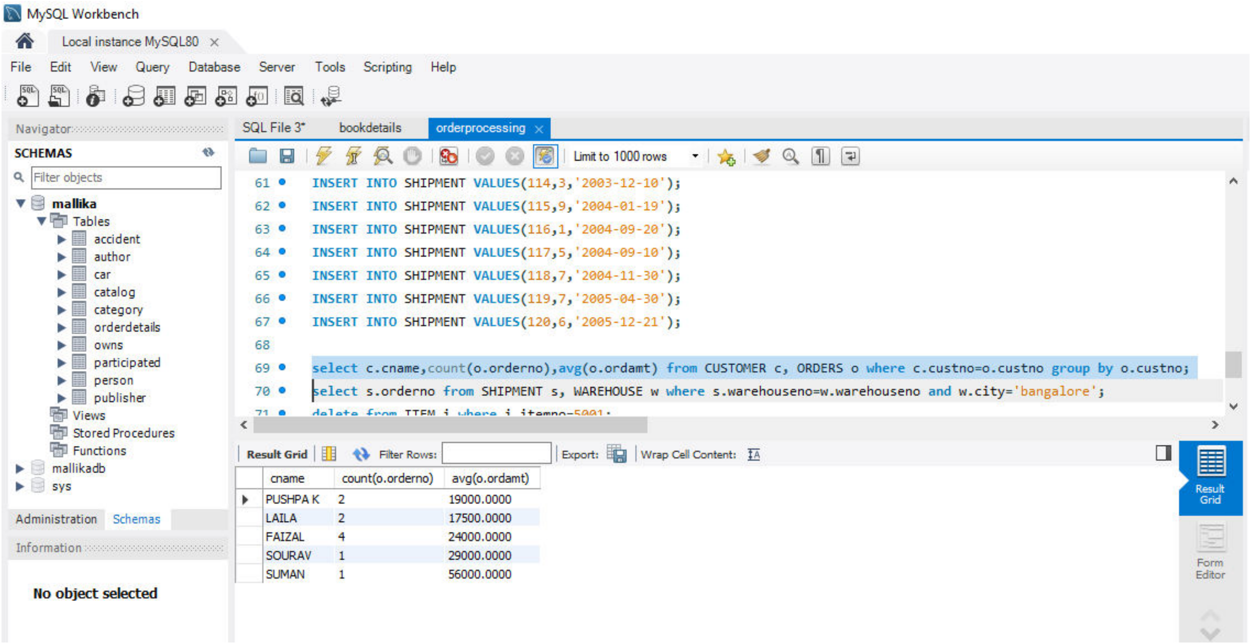



```
INSERT INTO WAREHOUSE VALUES(1,'DELHI');
INSERT INTO WAREHOUSE VALUES(2,'BOMBAY');
INSERT INTO WAREHOUSE VALUES(3,'CHENNAI');
INSERT INTO WAREHOUSE VALUES(4,'BANGALORE');
INSERT INTO WAREHOUSE VALUES(5,'BANGALORE');
INSERT INTO WAREHOUSE VALUES(6,'DELHI');
INSERT INTO WAREHOUSE VALUES(7,'BOMBAY');
INSERT INTO WAREHOUSE VALUES(8,'CHENNAI');
INSERT INTO WAREHOUSE VALUES(9,'DELHI');
INSERT INTO WAREHOUSE VALUES(10,'BANGALORE');

INSERT INTO SHIPMENT VALUES(111,1,'2002-02-10');
INSERT INTO SHIPMENT VALUES(112,5,'2002-09-10');
INSERT INTO SHIPMENT VALUES(113,8,'2003-02-10');
INSERT INTO SHIPMENT VALUES(114,3,'2003-12-10');
INSERT INTO SHIPMENT VALUES(115,9,'2004-01-19');
INSERT INTO SHIPMENT VALUES(116,1,'2004-09-20');
INSERT INTO SHIPMENT VALUES(117,5,'2004-09-10');
INSERT INTO SHIPMENT VALUES(118,7,'2004-11-30');
INSERT INTO SHIPMENT VALUES(119,7,'2005-04-30');
INSERT INTO SHIPMENT VALUES(120,6,'2005-12-21');
```

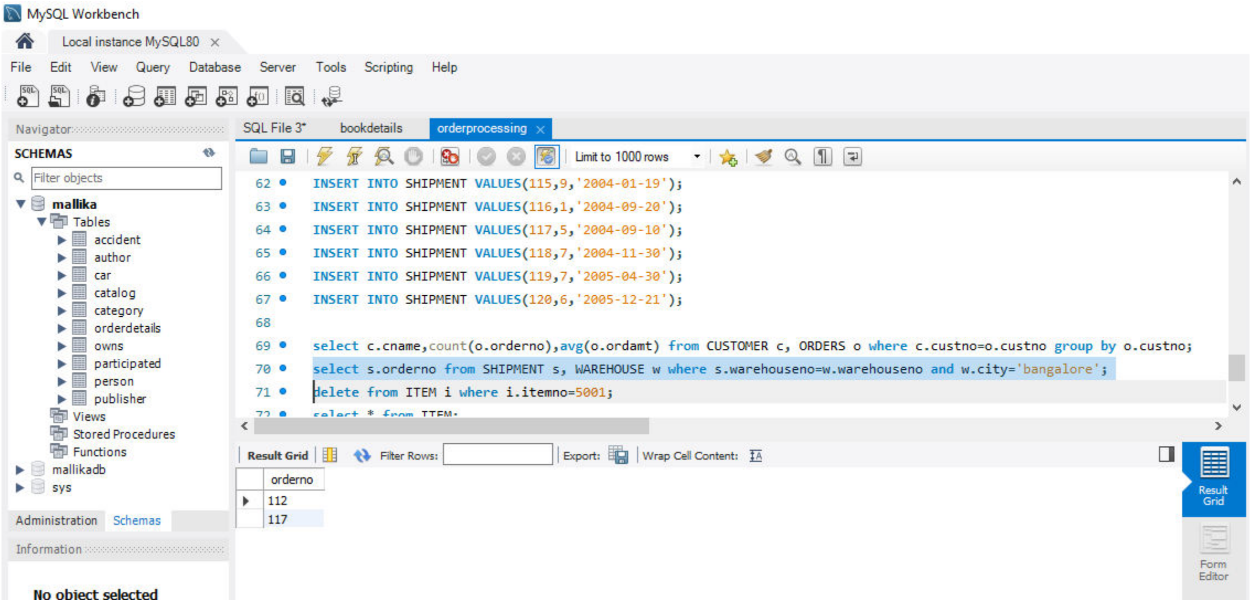


```
INSERT INTO WAREHOUSE VALUES(7,'BOMBAY');
INSERT INTO WAREHOUSE VALUES(8,'CHENNAI');
INSERT INTO WAREHOUSE VALUES(9,'DELHI');
INSERT INTO WAREHOUSE VALUES(10,'BANGALORE');

INSERT INTO SHIPMENT VALUES(111,1,'2002-02-10');
INSERT INTO SHIPMENT VALUES(112,5,'2002-09-10');
INSERT INTO SHIPMENT VALUES(113,8,'2003-02-10');
INSERT INTO SHIPMENT VALUES(114,3,'2003-12-10');
INSERT INTO SHIPMENT VALUES(115,9,'2004-01-19');
INSERT INTO SHIPMENT VALUES(116,1,'2004-09-20');
INSERT INTO SHIPMENT VALUES(117,5,'2004-09-10');
INSERT INTO SHIPMENT VALUES(118,7,'2004-11-30');
INSERT INTO SHIPMENT VALUES(119,7,'2005-04-30');
INSERT INTO SHIPMENT VALUES(120,6,'2005-12-21');

select c.cname,count(o.orderno),avg(o.ordamt) from CUSTOMER c, ORDERS o where c.custno=o.custno group by o.custno;
select s.orderno from SHIPMENT s, WAREHOUSE w where s.warehouseno=w.warehouseno and w.city='bangalore';
delete from ITEM i where i.itemno=5001;
select * from ITEM;
```



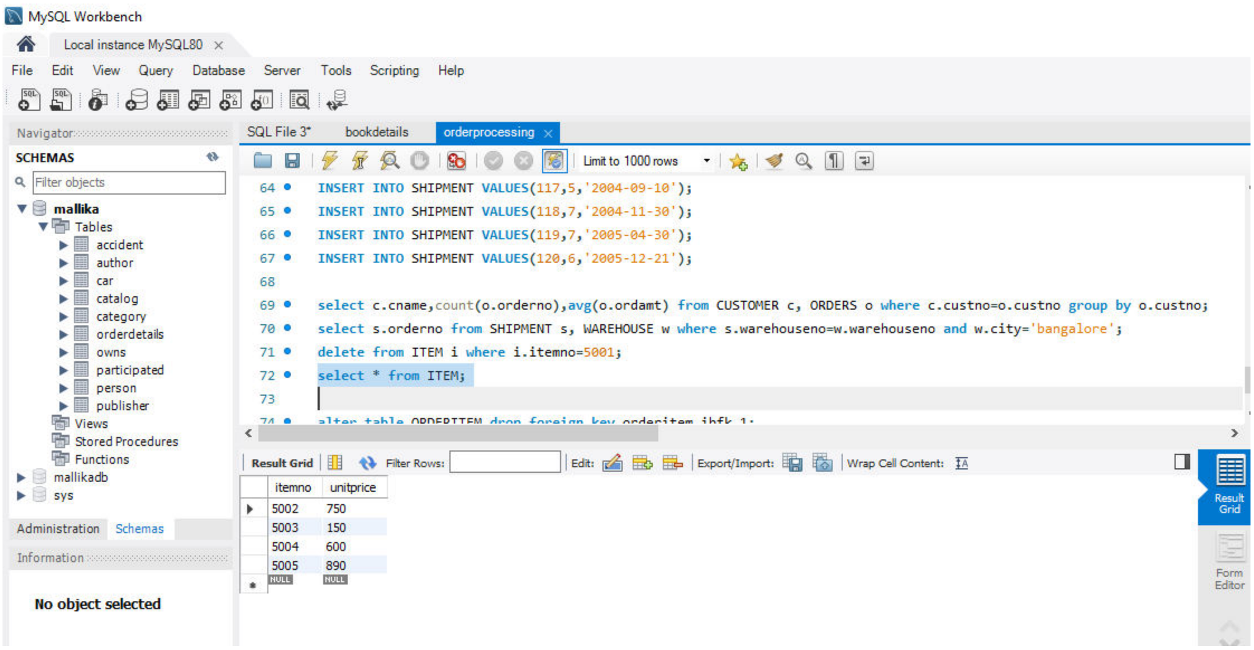
```sql
INSERT INTO SHIPMENT VALUES(114,3,'2003-12-10');
INSERT INTO SHIPMENT VALUES(115,9,'2004-01-19');
INSERT INTO SHIPMENT VALUES(116,1,'2004-09-20');
INSERT INTO SHIPMENT VALUES(117,5,'2004-09-10');
INSERT INTO SHIPMENT VALUES(118,7,'2004-11-30');
INSERT INTO SHIPMENT VALUES(119,7,'2005-04-30');
INSERT INTO SHIPMENT VALUES(120,6,'2005-12-21');

select c.cname,count(o.orderno),avg(o.ordamt) from CUSTOMER c, ORDERS o where c.custno=o.custno group by o.custno;
select s.orderno from SHIPMENT s, WAREHOUSE w where s.warehouseno=w.warehouseno and w.city='bangalore';
delete from ITEM i where i.itemno=5001;
```

cname	count(o.orderno)	avg(o.ordamt)
PUSHPA K	2	19000.0000
LAILA	2	17500.0000
FAIZAL	4	24000.0000
SOURAV	1	29000.0000
SUMAN	1	56000.0000



```sql
INSERT INTO SHIPMENT VALUES(115,9,'2004-01-19');
INSERT INTO SHIPMENT VALUES(116,1,'2004-09-20');
INSERT INTO SHIPMENT VALUES(117,5,'2004-09-10');
INSERT INTO SHIPMENT VALUES(118,7,'2004-11-30');
INSERT INTO SHIPMENT VALUES(119,7,'2005-04-30');
INSERT INTO SHIPMENT VALUES(120,6,'2005-12-21');

select c.cname,count(o.orderno),avg(o.ordamt) from CUSTOMER c, ORDERS o where c.custno=o.custno group by o.custno;
select s.orderno from SHIPMENT s, WAREHOUSE w where s.warehouseno=w.warehouseno and w.city='bangalore';
delete from ITEM i where i.itemno=5001;
select * from ITEM;
```

orderno
112
117



```
INSERT INTO SHIPMENT VALUES(117,5,'2004-09-10');
INSERT INTO SHIPMENT VALUES(118,7,'2004-11-30');
INSERT INTO SHIPMENT VALUES(119,7,'2005-04-30');
INSERT INTO SHIPMENT VALUES(120,6,'2005-12-21');

select c.cname,count(o.orderno),avg(o.ordamt) from CUSTOMER c, ORDERS o where c.custno=o.custno group by o.custno;
select s.orderno from SHIPMENT s, WAREHOUSE w where s.warehouseno=w.warehouseno and w.city='bangalore';
delete from ITEM i where i.itemno=5001;
select * from ITEM;

alter table ORDERITEM drop foreign key orderitem_ibfk_1;
```

itemno	unitprice
5002	750
5003	150
5004	600
5005	890
NULL	NULL

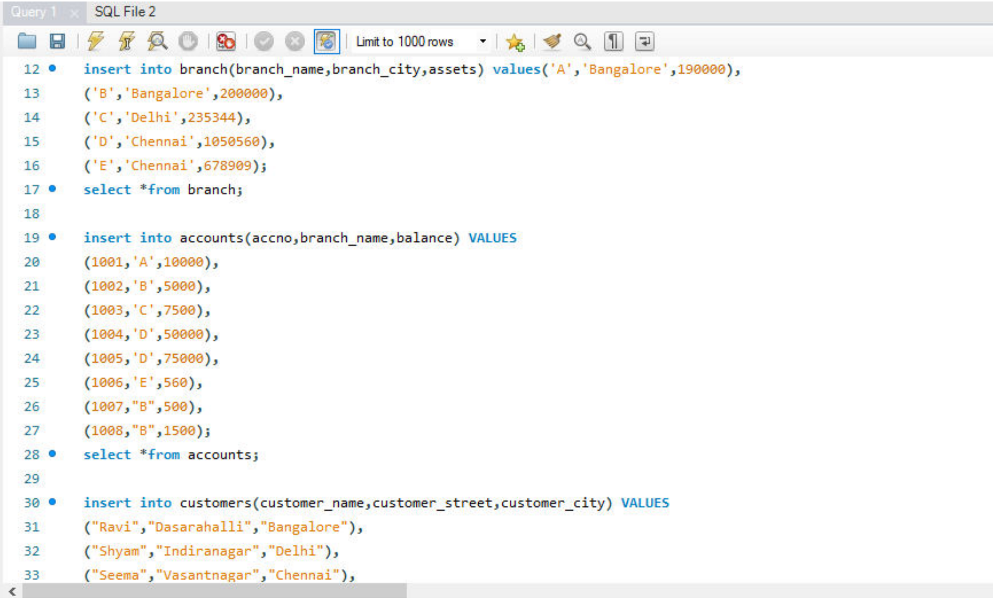
LAB 4

BANKDETAILS database

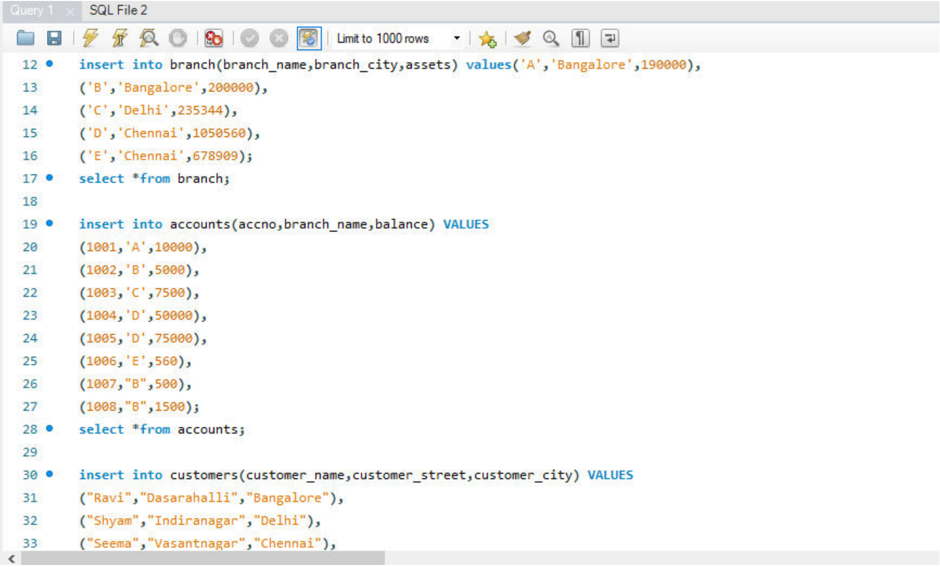
```
use
mallika;
          create table branch( branch_name varchar(30) primary key, branch_city varchar(30), assets real);
          create table accounts( accno int primary key, branch_name varchar(30), balance real,foreign key
          (branch_name) references branch(branch_name) on delete cascade on update cascade);
          create table customers( customer_name varchar(30) primary key,customer_street
          varchar(20),customer_city varchar(20));
          create table depositor(customer_name varchar(30),accno int,primary key(customer_name ,accno),foreign
          key (accno) references accounts(accno) on delete cascade on update cascade,foreign key (customer_name)
          references customers(customer_name) on delete cascade on update cascade);
          create table loan( loan_number int primary key,branch_name varchar(30),amount real,foreign key
          (branch_name) references branch(branch_name));
          create table borrower (customer_name varchar(30),loan_number int,primary key(customer_name,
          loan_number),foreign key (customer_name) references customers(customer_name) on delete cascade on
          update cascade,foreign key (loan_number) references loan(loan_number) on delete cascade on update
          cascade);
          show tables;
          insert into branch(branch_name,branch_city,assets) values('A','Bangalore',190000),
          ('B','Bangalore',200000),
          ('C','Delhi',235344),
          ('D','Chennai',1050560),
          ('E','Chennai',678909);
          select *from branch;
          insert into accounts(accno,branch_name,balance) VALUES
          (1001,'A',10000),
          (1002,'B',5000),
(1003,'C',7500),
(1004,'D',50000),
(1005,'D',75000),
(1006,'E',560),
(1007,"B",500),
(1008,"B",1500);
select *from accounts;
insert into customers(customer_name,customer_street,customer_city) VALUES
("Ravi","Dasarahalli","Bangalore"),
("Shyam","Indiranagar","Delhi"),
("Seema","Vasantnagar","Chennai"),
("Arpita","Church Street","Bangalore"),
("Vinay","MG Road","Chennai");
select *from customer;
insert into depositor(customer_name,accno) VALUES
("Ravi",1001),
("Ravi",1002),
("Shyam",1003),
("Seema",1004),
("Seema",1005),
("Arpita",1006),
("Vinay",1007),
("Vinay",1008);
select *from depositor;
insert into loan(loan_number,branch_name,amount) VALUES
(001,'A',10000),
(002,'B',25000),
(003,'B',250000),
(004,'C',5000),
(005,'E',90000);
select *from loan;
insert into borrower(customer_name,loan_number) VALUES
("Arpita",001),
("Ravi",002),
("Arpita",003),
("Shyam",004),
("Vinay",005);
select *from borrower;
select customer_name from depositor
join accounts on depositor.accno = accounts.accno where accounts.branch_name = "D"
group by depositor.customer_name having count(depositor.customer_name) >=2;
select customer_name from depositor
join accounts on accounts.accno = depositor.accno
join branch on branch.branch_name = accounts.branch_name
where branch.branch_city = "Bangalore"
GROUP BY depositor.customer_name
having count(DISTINCT branch.branch_name) = (SELECT COUNT(branch_name)
FROM branch
WHERE branch_city = 'Bangalore');
delete from accounts where branch_name in
(select branch_name from branch where branch_city="Delhi");
```

```
select *from accounts;
```

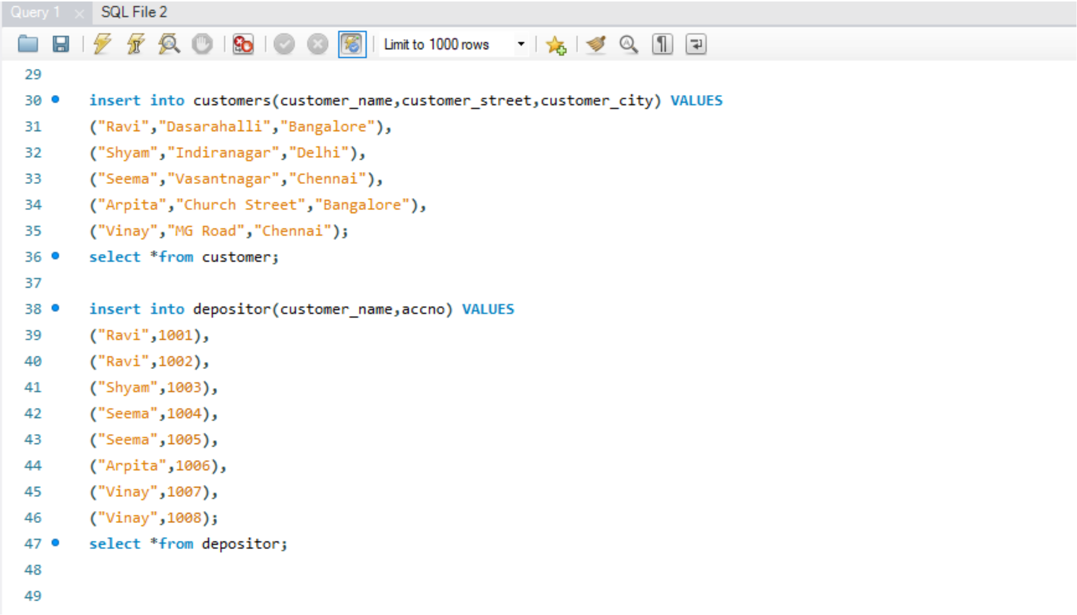
Output



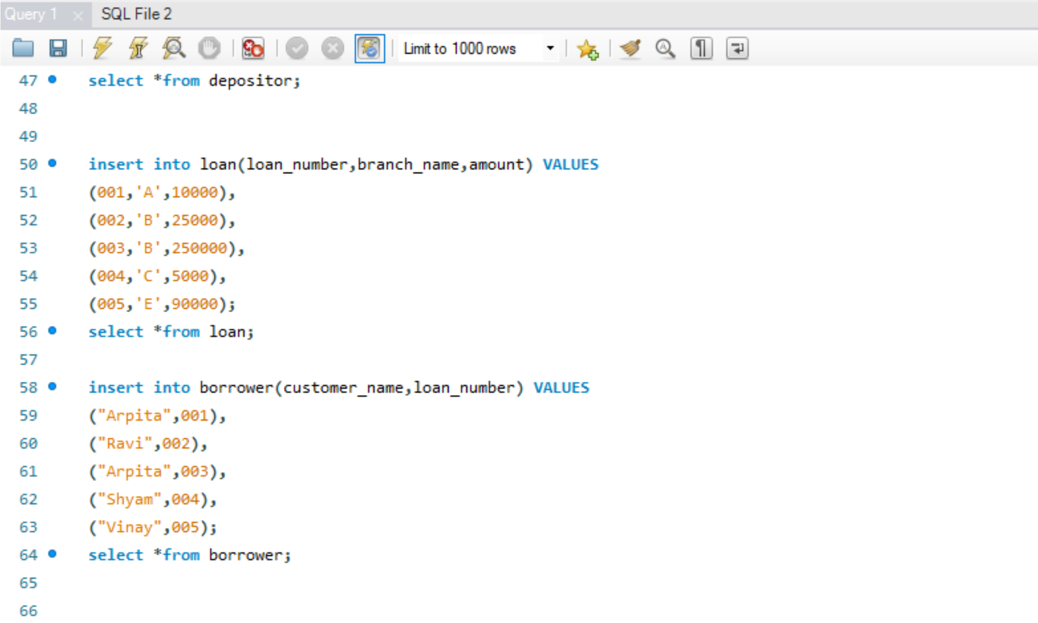
```
insert into branch(branch_name,branch_city,assets) values('A','Bangalore',190000),
('B','Bangalore',200000),
('C','Delhi',235344),
('D','Chennai',1050560),
('E','Chennai',678909);
select *from branch;

insert into accounts(accno,branch_name,balance) VALUES
(1001,'A',10000),
(1002,'B',5000),
(1003,'C',7500),
(1004,'D',50000),
(1005,'D',75000),
(1006,'E',560),
(1007,"B",500),
(1008,"B",1500);
select *from accounts;

insert into customers(customer_name,customer_street,customer_city) VALUES
("Ravi","Dasarahalli","Bangalore"),
("Shyam","Indiranagar","Delhi"),
("Seema","Vasantnagar","Chennai"),
```



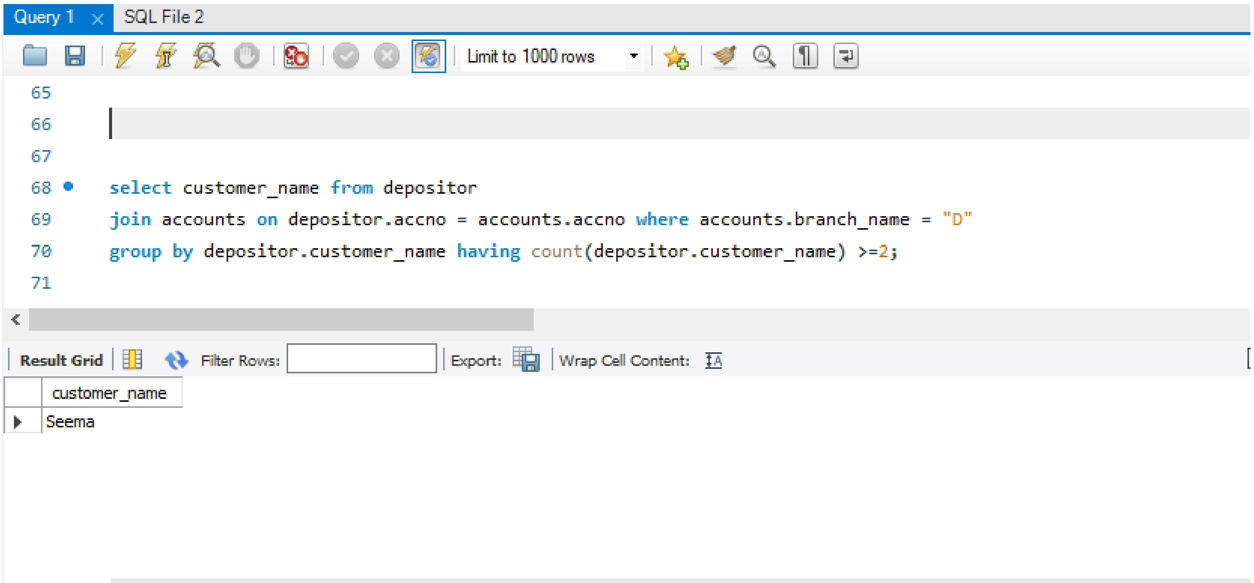
```
insert into branch(branch_name,branch_city,assets) values('A','Bangalore',190000),
('B','Bangalore',200000),
('C','Delhi',235344),
('D','Chennai',1050560),
('E','Chennai',678909);
select *from branch;

insert into accounts(accno,branch_name,balance) VALUES
(1001,'A',10000),
(1002,'B',5000),
(1003,'C',7500),
(1004,'D',50000),
(1005,'D',75000),
(1006,'E',560),
(1007,"B",500),
(1008,"B",1500);
select *from accounts;

insert into customers(customer_name,customer_street,customer_city) VALUES
("Ravi","Dasarahalli","Bangalore"),
("Shyam","Indiranagar","Delhi"),
("Seema","Vasantnagar","Chennai"),
```



```
insert into customers(customer_name,customer_street,customer_city) VALUES
("Ravi","Dasarahalli","Bangalore"),
("Shyam","Indiranagar","Delhi"),
("Seema","Vasantnagar","Chennai"),
("Arpita","Church Street","Bangalore"),
("Vinay","MG Road","Chennai");
select *from customer;

insert into depositor(customer_name,accno) VALUES
("Ravi",1001),
("Ravi",1002),
("Shyam",1003),
("Seema",1004),
("Seema",1005),
("Arpita",1006),
("Vinay",1007),
("Vinay",1008);
select *from depositor;


```

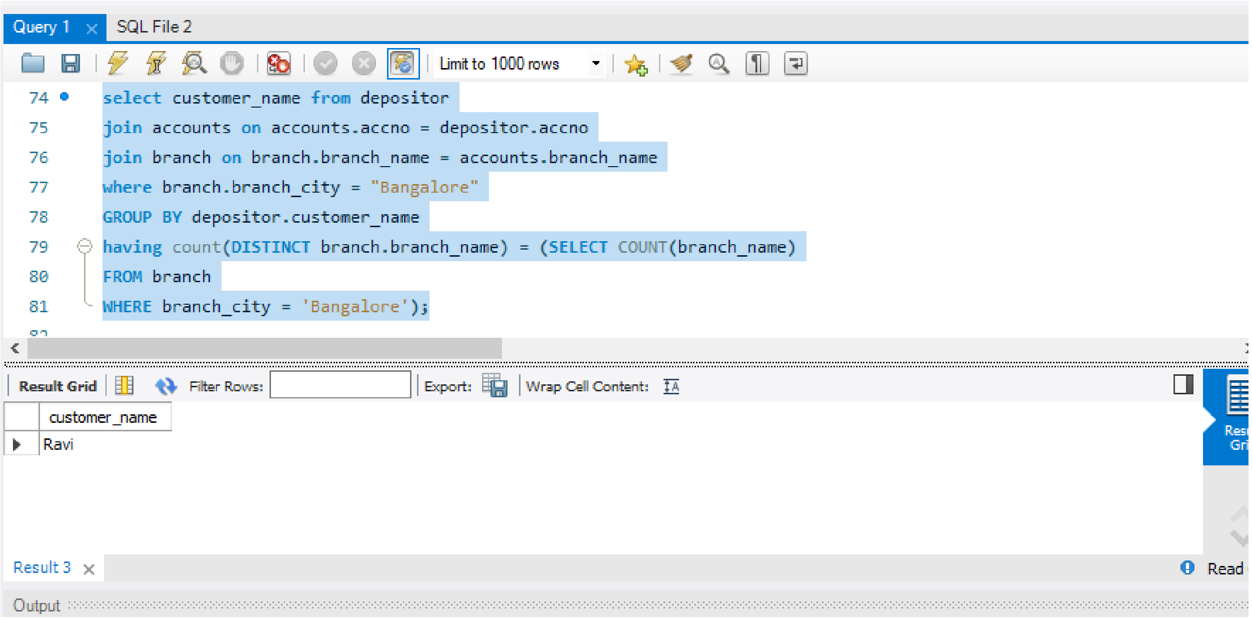


```
select *from depositor;


insert into loan(loan_number,branch_name,amount) VALUES
(001,'A',10000),
(002,'B',25000),
(003,'B',250000),
(004,'C',5000),
(005,'E',90000);
select *from loan;

insert into borrower(customer_name,loan_number) VALUES
("Arpita",001),
("Ravi",002),
("Arpita",003),
("Shyam",004),
("Vinay",005);
select *from borrower;


```



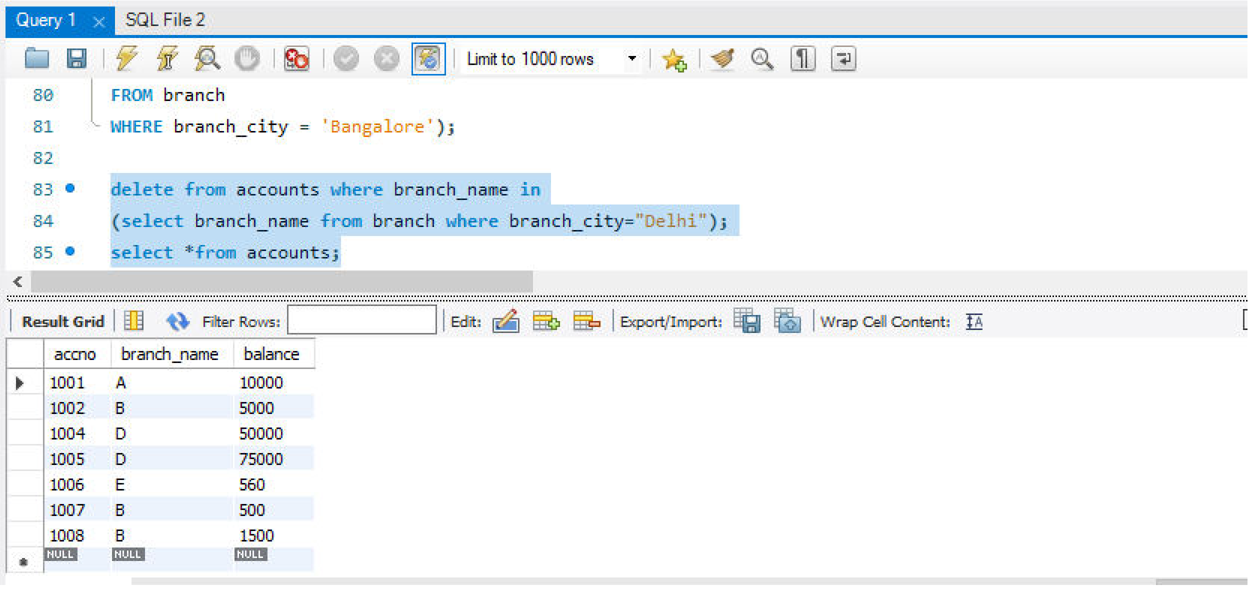
```sql

select customer_name from depositor
join accounts on depositor.accno = accounts.accno where accounts.branch_name = "D"
group by depositor.customer_name having count(depositor.customer_name) >=2;
```

customer_name
Seema



```sql
select customer_name from depositor
join accounts on accounts.accno = depositor.accno
join branch on branch.branch_name = accounts.branch_name
where branch.branch_city = "Bangalore"
GROUP BY depositor.customer_name
having count(DISTINCT branch.branch_name) = (SELECT COUNT(branch_name)
FROM branch
WHERE branch_city = 'Bangalore');
```

customer_name
Ravi



```
FROM branch
WHERE branch_city = 'Bangalore');

delete from accounts where branch_name in
(select branch_name from branch where branch_city="Delhi");
select *from accounts;
```

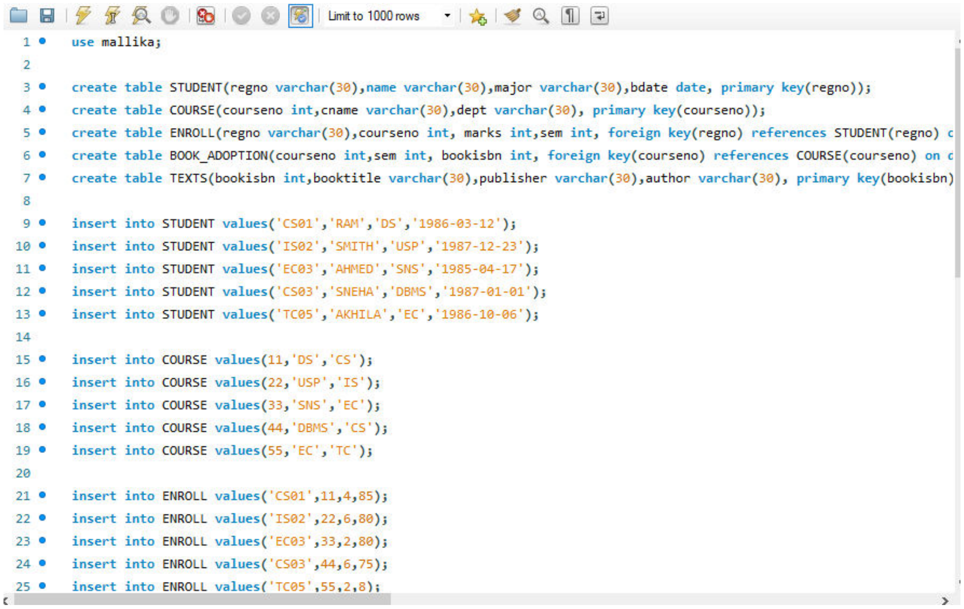
accno	branch_name	balance
1001	A	10000
1002	B	5000
1004	D	50000
1005	D	75000
1006	E	560
1007	B	500
1008	B	1500
NULL	NULL	NULL

LAB 5

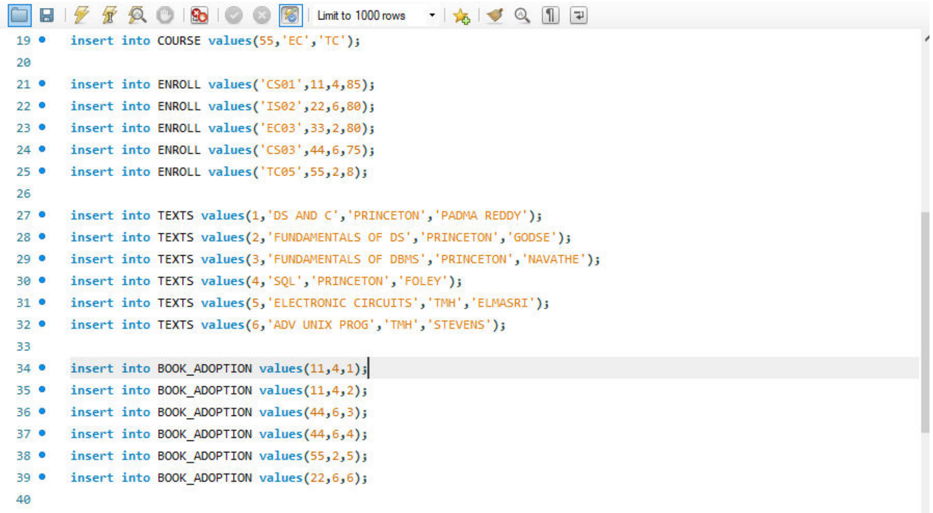
STUDENTENROLLMENT database

```
use
mallika;
            create table STUDENT(regno varchar(30),name varchar(30),major varchar(30),bdate date, primary
            key(regno));
            create table COURSE(courseno int,cname varchar(30),dept varchar(30), primary key(courseno));
            create table ENROLL(regno varchar(30),courseno int, marks int,sem int, foreign key(regno) references
            STUDENT(regno) on delete cascade on update cascade, foreign key(courseno) references COURSE(courseno)
            on delete cascade on update cascade);
            create table BOOK_ADOPTION(courseno int,sem int, bookisbn int, foreign key(courseno) references
            COURSE(courseno) on delete cascade on update cascade, foreign key(bookisbn) references
            TEXTS(bookisbn));
            create table TEXTS(bookisbn int,booktitle varchar(30),publisher varchar(30),author varchar(30),
            primary key(bookisbn));
            insert into STUDENT values('CS01','RAM','DS','1986-03-12');
            insert into STUDENT values('IS02','SMITH','USP','1987-12-23');
            insert into STUDENT values('EC03','AHMED','SNS','1985-04-17');
            insert into STUDENT values('CS03','SNEHA','DBMS','1987-01-01');
            insert into STUDENT values('TC05','AKHILA','EC','1986-10-06');
            insert into COURSE values(11,'DS','CS');
            insert into COURSE values(22,'USP','IS');
            insert into COURSE values(33,'SNS','EC');
            insert into COURSE values(44,'DBMS','CS');
            insert into COURSE values(55,'EC','TC');
            insert into ENROLL values('CS01',11,4,85);
            insert into ENROLL values('IS02',22,6,80);
insert into ENROLL values('EC03',33,2,80);
insert into ENROLL values('CS03',44,6,75);
insert into ENROLL values('TC05',55,2,8);
insert into TEXTS values(1,'DS AND C','PRINCETON','PADMA REDDY');
insert into TEXTS values(2,'FUNDAMENTALS OF DS','PRINCETON','GODSE');
insert into TEXTS values(3,'FUNDAMENTALS OF DBMS','PRINCETON','NAVATHE');
insert into TEXTS values(4,'SQL','PRINCETON','FOLEY');
insert into TEXTS values(5,'ELECTRONIC CIRCUITS','TMH','ELMASRI');
insert into TEXTS values(6,'ADV UNIX PROG','TMH','STEVENS');
insert into BOOK_ADOPTION values(11,4,1);
insert into BOOK_ADOPTION values(11,4,2);
insert into BOOK_ADOPTION values(44,6,3);
insert into BOOK_ADOPTION values(44,6,4);
insert into BOOK_ADOPTION values(55,2,5);
insert into BOOK_ADOPTION values(22,6,6);
insert into TEXTS values(7,'GET STARTED WITH C','PRINCETON','THOMSON');
insert into BOOK_ADOPTION values(55,4,7);
select * from TEXTS;
select * from BOOK_ADOPTION;
select c.courseno,b.bookisbn,t.booktitle from BOOK_ADOPTION b,TEXTS t,COURSE c
where c.courseno=b.courseno
and b.bookisbn=t.bookisbn
and c.dept='CS'
group by b.courseno having count(b.courseno)>=2 order by t.booktitle;
select distinct c.dept from COURSE c, BOOK_ADOPTION b, TEXTS t
where c.courseno=b.courseno
and b.bookisbn=t.bookisbn
and t.publisher='PRINCETON';
```

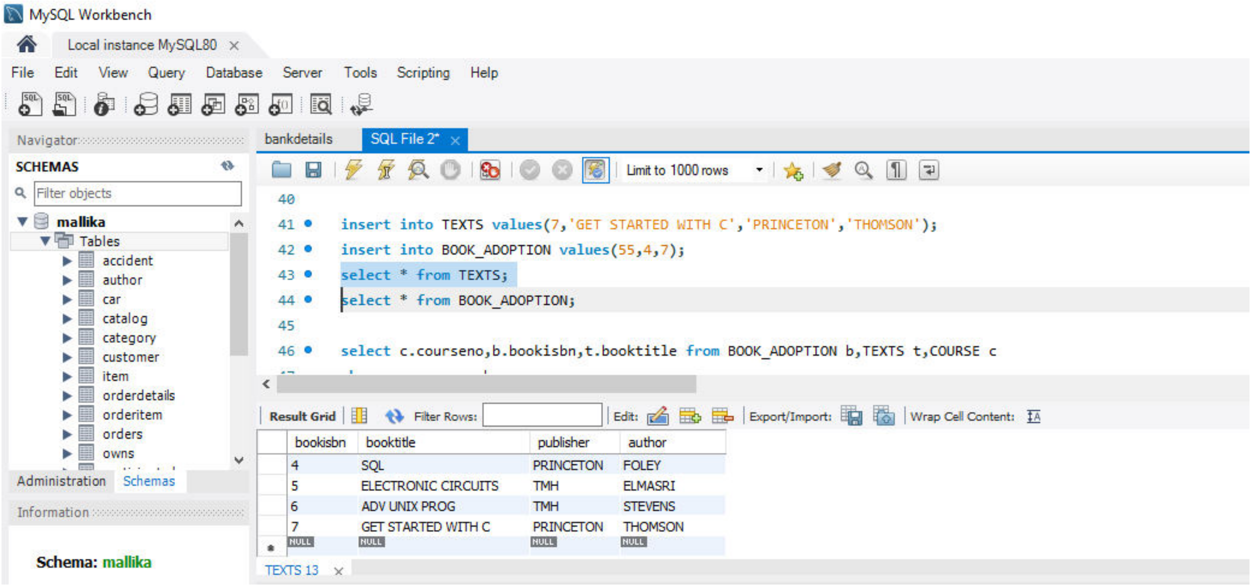
Output



```
use mallika;

create table STUDENT(regno varchar(30),name varchar(30),major varchar(30),bdate date, primary key(regno));
create table COURSE(courseno int,cname varchar(30),dept varchar(30), primary key(courseno));
create table ENROLL(regno varchar(30),courseno int, marks int,sem int, foreign key(regno) references STUDENT(regno) c
create table BOOK_ADOPTION(courseno int,sem int, bookisbn int, foreign key(courseno) references COURSE(courseno) on c
create table TEXTS(bookisbn int,booktitle varchar(30),publisher varchar(30),author varchar(30), primary key(bookisbn)

insert into STUDENT values('CS01','RAM','DS','1986-03-12');
insert into STUDENT values('IS02','SMITH','USP','1987-12-23');
insert into STUDENT values('EC03','AHMED','SNS','1985-04-17');
insert into STUDENT values('CS03','SNEHA','DBMS','1987-01-01');
insert into STUDENT values('TC05','AKHILA','EC','1986-10-06');

insert into COURSE values(11,'DS','CS');
insert into COURSE values(22,'USP','IS');
insert into COURSE values(33,'SNS','EC');
insert into COURSE values(44,'DBMS','CS');
insert into COURSE values(55,'EC','TC');

insert into ENROLL values('CS01',11,4,85);
insert into ENROLL values('IS02',22,6,80);
insert into ENROLL values('EC03',33,2,80);
insert into ENROLL values('CS03',44,6,75);
insert into ENROLL values('TC05',55,2,8);
```



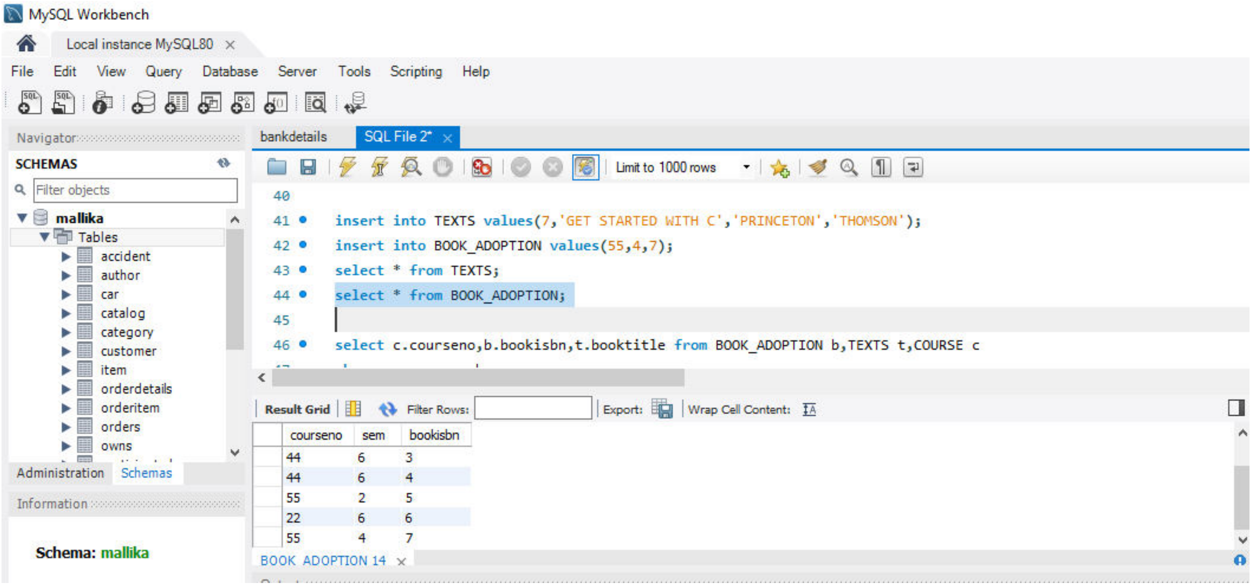
```
insert into COURSE values(55,'EC','TC');

insert into ENROLL values('CS01',11,4,85);
insert into ENROLL values('IS02',22,6,80);
insert into ENROLL values('EC03',33,2,80);
insert into ENROLL values('CS03',44,6,75);
insert into ENROLL values('TC05',55,2,8);

insert into TEXTS values(1,'DS AND C','PRINCETON','PADMA REDDY');
insert into TEXTS values(2,'FUNDAMENTALS OF DS','PRINCETON','GODSE');
insert into TEXTS values(3,'FUNDAMENTALS OF DBMS','PRINCETON','NAVATHE');
insert into TEXTS values(4,'SQL','PRINCETON','FOLEY');
insert into TEXTS values(5,'ELECTRONIC CIRCUITS','TMH','ELMASRI');
insert into TEXTS values(6,'ADV UNIX PROG','TMH','STEVENS');

insert into BOOK_ADOPTION values(11,4,1);
insert into BOOK_ADOPTION values(11,4,2);
insert into BOOK_ADOPTION values(44,6,3);
insert into BOOK_ADOPTION values(44,6,4);
insert into BOOK_ADOPTION values(55,2,5);
insert into BOOK_ADOPTION values(22,6,6);
```



Schema: mallika

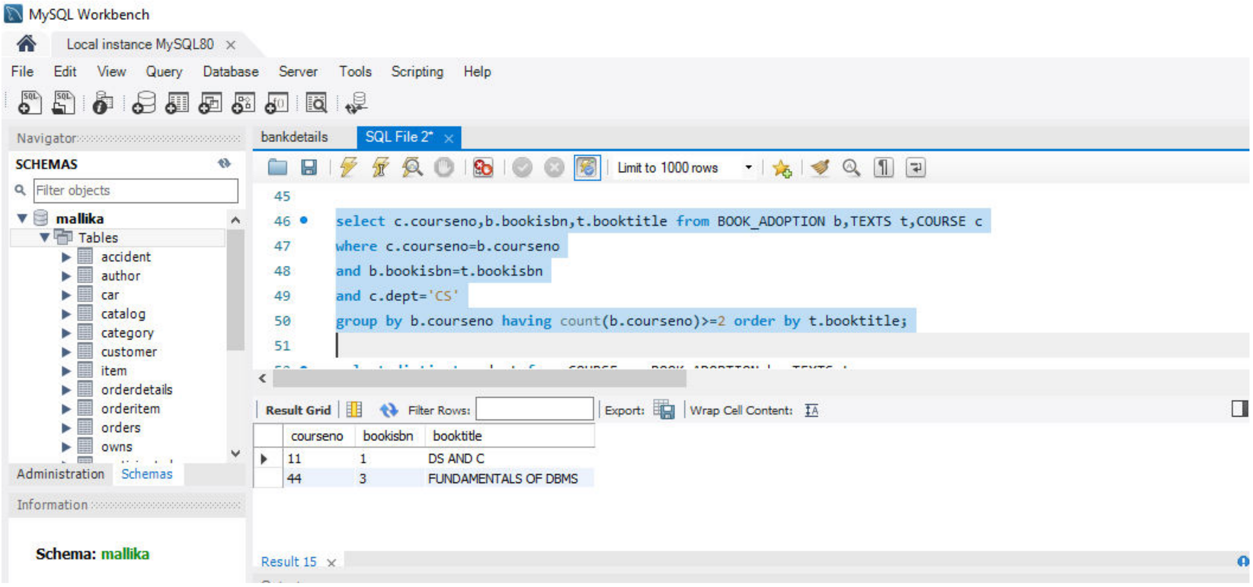
```
insert into TEXTS values(7,'GET STARTED WITH C','PRINCETON','THOMSON');
insert into BOOK_ADOPTION values(55,4,7);
select * from TEXTS;
select * from BOOK_ADOPTION;

select c.courseno,b.bookisbn,t.booktitle from BOOK_ADOPTION b,TEXTS t,COURSE c
```

bookisbn	booktitle	publisher	author
4	SQL	PRINCETON	FOLEY
5	ELECTRONIC CIRCUITS	TMH	ELMASRI
6	ADV UNIX PROG	TMH	STEVENS
7	GET STARTED WITH C	PRINCETON	THOMSON
NULL	NULL	NULL	NULL



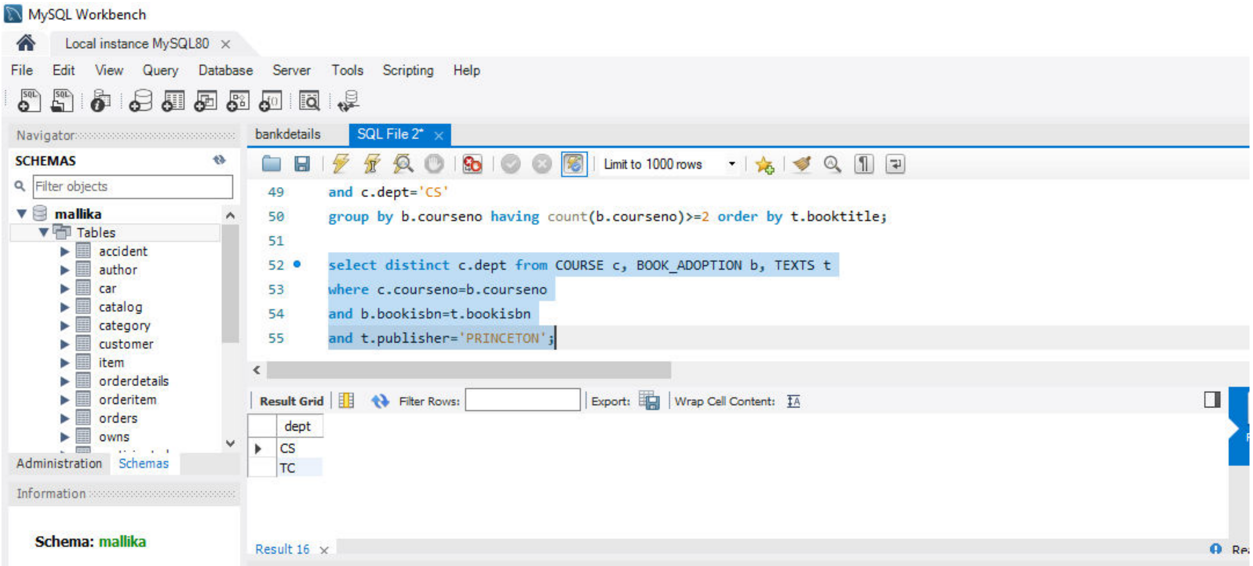
```sql
insert into TEXTS values(7,'GET STARTED WITH C','PRINCETON','THOMSON');
insert into BOOK_ADOPTION values(55,4,7);
select * from TEXTS;
select * from BOOK_ADOPTION;

select c.courseno,b.bookisbn,t.booktitle from BOOK_ADOPTION b,TEXTS t,COURSE c
```

courseno	sem	bookisbn
44	6	3
44	6	4
55	2	5
22	6	6
55	4	7



```sql
select c.courseno,b.bookisbn,t.booktitle from BOOK_ADOPTION b,TEXTS t,COURSE c
where c.courseno=b.courseno
and b.bookisbn=t.bookisbn
and c.dept='CS'
group by b.courseno having count(b.courseno)>=2 order by t.booktitle;
```

courseno	bookisbn	booktitle
11	1	DS AND C
44	3	FUNDAMENTALS OF DBMS



```
and c.dept='CS'
group by b.courseno having count(b.courseno)>=2 order by t.booktitle;

select distinct c.dept from COURSE c, BOOK_ADOPTION b, TEXTS t
where c.courseno=b.courseno
and b.bookisbn=t.bookisbn
and t.publisher='PRINCETON';
```

```
dept
CS
TC
```