DBMS LAB 1

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QUESTION 1.

```
-- \i /home/saloni/dbmslab/lab1 1.sql
CREATE TABLE employee(
  empid INT PRIMARY KEY NOT NULL,
  address VARCHAR (150) NOT NULL,
  doj DATE NOT NULL,
  salary INT NOT NULL
);
CREATE TABLE project(
  projectno INT PRIMARY KEY NOT NULL,
  duration INT NOT NULL,
  projectname VARCHAR(100)
);
CREATE TABLE workson(
  empid BIGINT NOT NULL,
  projno BIGINT NOT NULL,
  FOREIGN KEY (empid) REFERENCES employee (empid),
  FOREIGN KEY (projno) REFERENCES project(projectno)
);
INSERT INTO employee(empid, empname, address, doj, salary) VALUES
(1, 'Saloni R', 'Pearl plaza', DATE'2001-09-1', 1500);
INSERT INTO employee(empid, empname, address, doj, salary) VALUES (2,'Megh
S', 'gwalior', DATE'2002-06-12', 1500);
INSERT INTO employee(empid, empname, address, doj, salary) VALUES
(3, 'Sneha R', 'chennai 12', DATE'2005-05-23', 1500);
INSERT INTO employee(empid, empname, address, doj, salary) VALUES
(4,'Viswonathan M','musaffah 5', DATE'2011-12-21', 1500);
INSERT INTO employee(empid, empname, address, doj, salary) VALUES
(5, 'Udit', 'trichy 9', DATE'1998-01-04', 1500);
```

```
INSERT INTO employee(empid, empname, address, doj, salary) VALUES
(6, 'Pradeep S', 'chennai 8', DATE'2011-01-27', 1500);
INSERT INTO employee(empid, empname, address, doj, salary) VALUES
(7, 'Bhanan Abdul', 'burj', DATE'2020-07-14', 1500);
INSERT INTO employee(empid, empname, address, doj, salary) VALUES (8,'Boha
mehta','gujarat', DATE'2004-11-11', 1500);
INSERT INTO project(projectno,duration,projectname) VALUES (1,2,'Build a
recommendar system');
INSERT INTO project(projectno,duration,projectname) VALUES (2,3,'State
machine project');
INSERT INTO project(projectno,duration,projectname) VALUES
(3,4,'Randomised algorithms');
INSERT INTO project(projectno,duration,projectname) VALUES
(4,1,'Automata');
INSERT INTO project(projectno, duration, projectname) VALUES (5,3, 'Build a
NN');
INSERT INTO project(projectno,duration,projectname) VALUES (6,7,'LSTM');
INSERT INTO project(projectno,duration,projectname) VALUES (7,1,'Develop a
todo app');
INSERT INTO project(projectno,duration,projectname) VALUES (8,12,'Develop
a social media');
INSERT INTO project(projectno,duration,projectname) VALUES (9,3,'Develop a
exercise app');
INSERT INTO workson(empid, projno) VALUES (1,9);
INSERT INTO workson(empid, projno) VALUES (2,9);
INSERT INTO workson(empid, projno) VALUES (3,3);
INSERT INTO workson(empid, projno) VALUES (4,3);
INSERT INTO workson(empid, projno) VALUES (5,2);
INSERT INTO workson(empid, projno) VALUES (6,4);
INSERT INTO workson(empid, projno) VALUES (7,2);
INSERT INTO workson(empid, projno) VALUES (8,8);
SELECT * FROM employee ORDER BY empname DESC;
SELECT * FROM project WHERE projectno=2;
SELECT empname FROM employee WHERE empname LIKE 'B%';
```

```
-- question 4
SELECT empid FROM workson WHERE projno=9;
```

```
postgres=# CREATE DATABASE projectdetails;
CREATE DATABASE
postgres=# \c projectdetails
You are now connected to database "projectdetails" as user "postgres".
projectdetails=# \i /home/saloni/dbmslab/lab1_1.sql
CREATE TABLE
CREATE TABLE
CREATE TABLE
INSERT 0 1
           empname | address | doj
 empid |
                                                 | salary
     4 | Viswonathan M | musaffah 5 | 2011-12-21 |
                                                     1500
                      | trichy 9
                                    | 1998-01-04 |
     5
       | Udit
                                                     1500
                                    2005-05-23
     3
       I Sneha R
                       | chennai 12
                                                     1500
        Saloni R
                       | Pearl plaza | 2001-09-01 |
                                                     1500
     1
       | Pradeep S
     б
                       | chennai 8
                                    2011-01-27
                                                     1500
     2
       | Megh S
                       | gwalior
                                    | 2002-06-12 |
                                                     1500
                       gujarat
     8
        Boha mehta
                                    2004-11-11
                                                     1500
        Bhanan Abdul | burj
                                    2020-07-14
                                                     1500
(8 rows)
 projectno | duration |
                            projectname
         2
                   3 | State machine project
(1 row)
   empname
 Bhanan Abdul
 Boha mehta
(2 rows)
```

```
empid

1
2
(2 rows)

projectdetails=#
```

QUESTION 2:

```
-- \c studentdetails;
-- \i /home/saloni/dbmslab/lab1 2.sql
CREATE TABLE student(
  rollno INT NOT NULL PRIMARY KEY,
  name VARCHAR (100) NOT NULL,
  mark sub1 INT NOT NULL,
  mark sub2 INT NOT NULL,
  mark sub3 INT NOT NULL,
  total INT
);
CREATE TABLE department(
  deptid INT NOT NULL PRIMARY KEY,
  deptname VARCHAR(100) NOT NULL,
  hodname VARCHAR (100) NOT NULL
);
CREATE TABLE studdep(
  rollno INT NOT NULL ,
  deptid INT NOT NULL,
  FOREIGN KEY (rollno) REFERENCES student(rollno),
  FOREIGN KEY (deptid) REFERENCES department(deptid)
```

```
INSERT INTO student (rollno, name, mark sub1, mark sub2, mark sub3,
mark sub4, mark sub5, mark sub6) VALUES(1, 'Saloni', 20, 10, 50, 15, 40, 10);
INSERT INTO student (rollno, name, mark sub1, mark sub2, mark sub3,
mark sub4, mark sub5, mark sub6) VALUES(2, 'Sneha', 30, 20, 51, 11, 55, 60);
INSERT INTO student (rollno, name, mark sub1, mark sub2, mark sub3,
mark sub4, mark sub5, mark sub6) VALUES(3,'Meghdeepa',100,
100, 52, 14, 44, 14);
INSERT INTO student (rollno, name, mark sub1, mark sub2, mark sub3,
100,100,100,100,100);
INSERT INTO student (rollno, name, mark sub1, mark sub2, mark sub3,
mark sub4, mark sub5, mark sub6) VALUES(5,'Viswonathan',90,
80,90,100,100,100);
INSERT INTO student (rollno, name, mark sub1, mark sub2, mark sub3,
INSERT INTO student (rollno, name, mark sub1, mark sub2, mark sub3,
INSERT INTO student (rollno, name, mark sub1, mark sub2, mark sub3,
mark sub4, mark sub5, mark sub6) VALUES(8, 'Hanan', 99, 100, 75, 92, 64, 76);
INSERT INTO student (rollno, name, mark sub1, mark sub2, mark sub3,
INSERT INTO student (rollno, name, mark sub1, mark sub2, mark sub3,
INSERT INTO department (deptid, deptname, hodname) VALUES (1, 'CSE', 'Dr
Priya');
INSERT INTO department (deptid, deptname, hodname) VALUES (2, 'EEE', 'Dr
Raja');
INSERT INTO department (deptid, deptname, hodname) VALUES (3, 'ECE', 'Dr
Sohan');
INSERT INTO studdep (rollno, deptid) VALUES (1,1);
INSERT INTO studdep (rollno, deptid) VALUES (2,2);
INSERT INTO studdep (rollno, deptid) VALUES (3,3);
INSERT INTO studdep (rollno, deptid) VALUES (4,1);
INSERT INTO studdep (rollno, deptid) VALUES (5,2);
INSERT INTO studdep (rollno, deptid) VALUES (6,3);
INSERT INTO studdep (rollno, deptid) VALUES (7,1);
INSERT INTO studdep (rollno, deptid) VALUES (8,2);
INSERT INTO studdep (rollno, deptid) VALUES (9,3);
```

```
INSERT INTO studdep (rollno, deptid) VALUES (10,1);

UPDATE student SET

total=mark_sub6+mark_sub5+mark_sub4+mark_sub3+mark_sub2+mark_sub1;
-- 2

SELECT student.rollno, student.name,
student.mark_sub1, student.mark_sub2, student.mark_sub3, student.mark_sub4, st
udent.mark_sub5, student.mark_sub6, student.total from student, studdep
WHERE student.rollno=studdep.rollno AND studdep.deptid=1;
-- 3

SELECT department.id, department.name, department.hodname from
department, studdep where department.deptid=studdep.deptid and
studdep.rollno=1;
-- 4

SELECT * FROM student WHERE total>500;
-- 5

SELECT hodname FROM department WHERE deptname='CSE';
-- 6

SELECT studdep.rollno FROM studdep, department where
department.deptid=studdep.deptid and department.deptname='CSE';
```

```
projectdetails=# CREATE DATABASE studentdetails;
CREATE DATABASE
projectdetails=# \c studentdetails;
You are now connected to database "studentdetails" as user "postgres".
studentdetails=# \i /home/saloni/dbmslab/lab1_2.sql
CREATE TABLE
CREATE TABLE
CREATE TABLE
INSERT 0 1
INSERT 0
INSERT 0 1
INSERT 0
INSERT 0 1
UPDATE 10
 rollno | name | mark_sub1 | mark_sub2 | mark_sub3 | mark_sub4 | mark_sub5 | mark_sub6 | total
                            20 |
      1 |
          Saloni |
                                         10 |
                                                      50 |
                                                                   15 |
                                                                                40 |
                                                                                             10 |
                                                                                                     145
          Pradeep |
      4
7
                            100 |
                                         100
                                                      100 I
                                                                  100 I
                                                                               100 I
                                                                                            100 I
                                                                                                     600
          Udit
                             90 |
                                          90 |
                                                       70
                                                                   55
                                                                                90
                                                                                             90
                                                                                                     485
     10 | Marmik |
                             30 j
                                          30 j
                                                       70 j
                                                                    25 j
                                                                                             12
                                                                                                     214
(4 rows)
psql:/home/saloni/dbmslab/lab1_2.sql:60: ERROR: column department.id does not exist
LINE 1: SELECT department.id, department.name, department.hodname fr...
 rollno |
              name
                       | mark_sub1 | mark_sub2 | mark_sub3 | mark_sub4 | mark_sub5 | mark_sub6 | total
      4
                                                          100 |
                                                                       100 |
                                                                                    100 |
          Pradeep
                                100
                                             100 I
                                                                                                 100
                                                                                                         600
          Viswonathan
                                 90 |
                                             80
                                                           90 |
                                                                       100
                                                                                    100 |
                                                                                                 100
                                                                                                         560
                                                           75
          Hanan
                                 99 j
                                             100
                                                                       92 |
                                                                                    64 |
                                                                                                 76
                                                                                                         506
(3 rows)
 hodname
 Dr Priya
(1 row)
```

```
rollno
------
1
4
7
10
(4 rows)
studentdetails=#
```

QUESTION 3:

```
-- \c salesdetails;
-- \i /home/saloni/dbmslab/lab1 3.sql
CREATE TABLE salesperson(
  name VARCHAR (50) NOT NULL,
  start year INT NOT NULL,
  dept no INT NOT NULL
);
CREATE TABLE trip(
  from city VARCHAR (100),
  to city VARCHAR (100),
  departure date DATE,
  FOREIGN KEY (ssn) REFERENCES salesperson(ssn)
);
CREATE TABLE salerep expense(
  trip id INT NOT NULL,
  expense type VARCHAR (50),
  amount INT NOT NULL,
  FOREIGN KEY (trip id) REFERENCES trip(trip id)
);
INSERT INTO salesperson (ssn,name,start year,dept no) VALUES
(100, 'Saloni', 2001, 1);
INSERT INTO salesperson (ssn, name, start year, dept no) VALUES (200, 'Megh
INSERT INTO salesperson (ssn, name, start year, dept no) VALUES (300, 'Sneha
s',2005,1);
INSERT INTO salesperson (ssn, name, start year, dept no) VALUES
(400, 'Viswonathan M', 2006, 3);
```

```
INSERT INTO salesperson (ssn, name, start year, dept no) VALUES (500, 'Pradeep
s',2006,1);
INSERT INTO salesperson (ssn, name, start year, dept no) VALUES (600, 'Hanan
Ab', 2011, 3);
INSERT INTO salesperson (ssn, name, start year, dept no) VALUES (700, 'Raj
gohil',2020,1);
INSERT INTO salesperson (ssn,name,start year,dept no) VALUES (800,'Jyothi
Rajesh',2021,5);
INSERT INTO salesperson (ssn, name, start year, dept no) VALUES
(900, 'Shreyash', 2015, 4);
INSERT INTO salesperson (ssn, name, start year, dept no) VALUES
(1000, 'Ahmed', 2019, 1);
INSERT INTO trip
(ssn, from city, to city, departure date, return date, trip id) VALUES
(100, 'mumbai', 'chennai', DATE'2001-09-1', DATE'2001-09-10',1);
INSERT INTO trip
(ssn,from city,to city,departure date,return date,trip id) VALUES
(200, 'delhi', 'mumbai', DATE'2011-10-1', DATE'2011-11-10',2);
INSERT INTO trip
(ssn, from city, to city, departure date, return date, trip id) VALUES
(300, 'mumbai', 'chennai', DATE'2001-02-22', DATE'2001-05-11', 3);
INSERT INTO trip
(ssn,from city,to city,departure date,return date,trip id) VALUES
(400, 'jaipur', 'mumbai', DATE'2021-09-1', DATE'2021-09-10', 4);
INSERT INTO trip
(ssn,from city,to city,departure date,return date,trip id) VALUES
(500, 'goa', 'jaipur', DATE'2015-09-1', DATE'2016-09-10', 5);
INSERT INTO trip
(ssn, from city, to city, departure date, return date, trip id) VALUES
(600, 'raipur', 'gondal', DATE'2019-10-1', DATE'2020-10-22', 6);
INSERT INTO trip
(ssn,from city,to city,departure date,return date,trip id) VALUES
(700, 'rajkot', 'dubai', DATE'2020-06-2', DATE'2020-09-23', 7);
INSERT INTO trip
(ssn, from city, to city, departure date, return date, trip id) VALUES
(800, 'chennai', 'rajkot', DATE'2016-04-1', DATE'2017-05-30',8);
INSERT INTO trip
(ssn, from city, to city, departure date, return date, trip id) VALUES
(900, 'hyderabad', 'abu dhabi', DATE'2015-05-12', DATE'2015-07-15', 9);
```

```
INSERT INTO trip
(ssn, from city, to city, departure date, return date, trip id) VALUES
(1000, 'vaapi', 'trichy', DATE'2016-06-1', DATE'2016-06-21',10);
INSERT INTO trip
(ssn,from city,to city,departure date,return date,trip id) VALUES
(100, 'ahmedabad', 'chennai', DATE'2005-07-1', DATE'2005-11-11', 11);
INSERT INTO trip
(ssn, from city, to city, departure date, return date, trip id) VALUES
(200, 'kashi', 'kolkata', DATE'2002-08-1', DATE'2003-12-18',12);
INSERT INTO trip
(ssn,from city,to city,departure date,return date,trip id) VALUES
(100, 'haridwar', 'udaipur', DATE'2007-11-1', DATE'2007-12-19', 13);
INSERT INTO salerep expense (trip id, expense type, amount) VALUES
(1, 'TRAVEL', 2000);
INSERT INTO salerep expense (trip id, expense type, amount) VALUES
(2, 'TRAVEL', 1500);
INSERT INTO salerep expense (trip id, expense type, amount) VALUES
(3, 'TRAVEL', 3000);
INSERT INTO salerep expense (trip id, expense type, amount) VALUES
(4, 'TRAVEL', 2000);
INSERT INTO salerep expense (trip id, expense type, amount) VALUES
(5, 'TRAVEL', 4500);
INSERT INTO salerep expense (trip id, expense type, amount) VALUES
(6, 'TRAVEL', 9800);
INSERT INTO salerep expense (trip id, expense type, amount) VALUES
(7, 'TRAVEL', 1000);
INSERT INTO salerep expense (trip id, expense type, amount) VALUES
(8, 'TRAVEL', 920);
INSERT INTO salerep expense (trip id, expense type, amount) VALUES
(9, 'TRAVEL', 100);
INSERT INTO salerep expense (trip id, expense type, amount) VALUES
(10, 'TRAVEL', 1230);
INSERT INTO salerep expense (trip id, expense type, amount) VALUES
(11, 'TRAVEL', 8530);
INSERT INTO salerep expense (trip id, expense type, amount) VALUES
(12, 'TRAVEL', 2134);
INSERT INTO salerep expense (trip id, expense type, amount) VALUES
(13, 'TRAVEL', 3564);
```

```
INSERT INTO salerep expense (trip id, expense type, amount) VALUES
(1, 'FOOD', 100);
INSERT INTO salerep_expense (trip_id,expense_type, amount) VALUES
(2, 'FOOD', 2456);
INSERT INTO salerep_expense (trip_id,expense_type, amount) VALUES
(3, 'FOOD', 2311);
INSERT INTO salerep expense (trip id, expense type, amount) VALUES
(4, 'FOOD', 1243);
INSERT INTO salerep expense (trip id, expense type, amount) VALUES
(5, 'FOOD', 100);
INSERT INTO salerep expense (trip id, expense type, amount) VALUES
(6, 'FOOD', 500);
INSERT INTO salerep expense (trip id, expense type, amount) VALUES
(7, 'FOOD', 600);
INSERT INTO salerep expense (trip id, expense type, amount) VALUES
(8, 'FOOD', 354);
INSERT INTO salerep expense (trip id, expense type, amount) VALUES
(9, 'FOOD', 200);
INSERT INTO salerep expense (trip id, expense type, amount) VALUES
(10, 'FOOD', 980);
INSERT INTO salerep_expense (trip_id,expense type, amount) VALUES
(11, 'FOOD', 209);
INSERT INTO salerep expense (trip id, expense type, amount) VALUES
(12, 'FOOD', 999);
INSERT INTO salerep expense (trip id, expense type, amount) VALUES
(13, 'FOOD', 399);
INSERT INTO salerep expense (trip id, expense type, amount) VALUES
(1, 'STAY', 1000);
INSERT INTO salerep expense (trip id, expense type, amount) VALUES
(2, 'STAY', 1200);
INSERT INTO salerep expense (trip id, expense type, amount) VALUES
(3, 'STAY', 4200);
INSERT INTO salerep expense (trip id, expense type, amount) VALUES
(4, 'STAY', 6500);
INSERT INTO salerep_expense (trip_id,expense_type, amount) VALUES
(5, 'STAY', 1200);
INSERT INTO salerep_expense (trip_id,expense_type, amount) VALUES
(6, 'STAY', 900);
INSERT INTO salerep_expense (trip_id,expense_type, amount) VALUES
(7, 'STAY', 800);
```

```
INSERT INTO salerep expense (trip id, expense type, amount) VALUES
(8, 'STAY', 100);
INSERT INTO salerep expense (trip id, expense type, amount) VALUES
(9, 'STAY', 190);
INSERT INTO salerep expense (trip id, expense type, amount) VALUES
(10, 'STAY', 720);
INSERT INTO salerep expense (trip id, expense type, amount) VALUES
(11, 'STAY', 980);
INSERT INTO salerep expense (trip id, expense type, amount) VALUES
(12, 'STAY', 870);
INSERT INTO salerep expense (trip id, expense type, amount) VALUES
(13, 'STAY', 2100);
-- question 1
SELECT ssn, from city, to city, departure date, return date, trip id
FROM
(SELECT trip.trip id, trip.ssn, trip.from city, trip.to city,
trip.departure date, trip.return_date,sum(salerep_expense.amount) total
FROM trip left join salerep expense
ON trip.trip id = salerep expense.trip id
GROUP BY trip.trip id) data
WHERE data.total>2000;
-- question 2
SELECT ssn
FROM (SELECT ssn, count(*) FROM trip WHERE to city='chennai'GROUP BY ssn)
WHERE count>1;
SELECT total FROM (SELECT trip.ssn,sum(salerep expense.amount) total
FROM trip join salerep expense
ON trip.trip id = salerep expense.trip id
GROUP BY trip.ssn)g WHERE ssn=1000;
SELECT * FROM salesperson ORDER BY name ASC;
```

```
postgres=# CREATE DATABASE salesdetails;
CREATE DATABASE
postgres=# \c salesdetails
You are now connected to database "salesdetails" as user "postgres".
salesdetails=# \i /home/saloni/dbmslab/lab1_3.sql
CREATE TABLE
CREATE TABLE
CREATE TABLE
INSERT 0 1
```

```
INSERT 0 1
 ssn | from_city | to_city | departure_date | return_date | trip_id
 100 | ahmedabad | chennai | 2005-07-01 | 2005-11-11 | 11
300 | mumbai | chennai | 2001-02-22 | 2001-05-11 | 3
                                                                            | 2005-11-11
| 2001-05-11
| 2016-09-10
| 2021-09-10
| 2016-06-21
| 2020-10-22
| 2007-12-19
| 2011-11-10
| 2020-09-23
| 2003-12-18
                                                                                                                 3
5
4
300 | mumbai | chennai | 2001-02-22 | 2001-05-11 | 500 | goa | jaipur | 2015-09-01 | 2016-09-10 | 400 | jaipur | mumbai | 2021-09-01 | 2021-09-10 | 1000 | vaapi | trichy | 2016-06-01 | 2016-06-21 | 600 | raipur | gondal | 2019-10-01 | 2020-10-22 | 100 | haridwar | udaipur | 2007-11-01 | 2007-12-19 | 200 | delhi | mumbai | 2011-10-01 | 2011-11-10 | 700 | rajkot | dubai | 2020-06-02 | 2020-09-23 | 200 | kashi | kolkata | 2002-08-01 | 2003-12-18 | 100 | mumbai | chennai | 2001-09-01 | 2001-09-10 |
                                                                                                                 10
                                                                                                                    б
                                                                                                                  13
                                                                                                                  2
7
                                                                                                                  12
(11 rows)
 ssn
 100
(1 row)
 total
 . . . . . . .
 2930
(1 row)
                 name | start_year | dept_no
 ssn
                                2019
 1000 | Ahmed
  600 | Hanan Ab
                                                 2011
   800 | Jyothi Rajesh |
                                                2021 |
                                                                        5
   200 | Megh S
                                                 2011 |
                                                2006 |
2020 |
2001 |
2015 |
2005 |
   500 | Pradeep S
   700 | Raj gohil
  100 | Saloni
  900 | Shreyash |
300 | Sneha S |
  400 | Viswonathan M | 2006 |
(10 rows)
salesdetails=#
```

QUESTION 4:

```
-- \c cardetails;
-- \i /home/saloni/dbmslab/lab1 4.sql
CREATE TABLE car(
  serial no INT PRIMARY KEY NOT NULL,
  model VARCHAR (150) NOT NULL,
  manufacturer VARCHAR (150) NOT NULL,
  price BIGINT NOT NULL
);
CREATE TABLE options(
  serial no INT NOT NULL,
  option name VARCHAR (150) NOT NULL,
  price BIGINT NOT NULL,
  FOREIGN KEY (serial no) REFERENCES car (serial no)
);
CREATE TABLE salesperson(
  salesperson id INT PRIMARY KEY,
);
CREATE TABLE sales(
  salesperson id INT NOT NULL,
  serial no INT NOT NULL,
  sale price BIGINT NOT NULL,
  FOREIGN KEY (salesperson id) REFERENCES salesperson(salesperson id)
);
INSERT INTO car (serial no, model, manufacturer, price) VALUES (1, 'modell',
'manufacturer1', 258000);
```

```
INSERT INTO car (serial no, model, manufacturer, price) VALUES (2, 'model2',
INSERT INTO car (serial no, model, manufacturer, price) VALUES (3, 'model3',
'manufacturer3', 896000);
INSERT INTO car (serial no, model, manufacturer, price) VALUES (4, 'model4',
INSERT INTO car (serial no, model, manufacturer, price) VALUES (5, 'model5',
'manufacturer5', 98000);
INSERT INTO car (serial no, model, manufacturer, price) VALUES (6, 'model6',
INSERT INTO car (serial no, model, manufacturer, price) VALUES (7, 'model7',
'manufacturer7', 256280);
INSERT INTO car (serial no, model, manufacturer, price) VALUES (8, 'model8',
'manufacturer8', 76430);
INSERT INTO car (serial no, model, manufacturer, price) VALUES (9, 'model9',
'manufacturer9', 192840);
INSERT INTO car (serial no, model, manufacturer, price) VALUES (10, 'model10',
'manufacturer10', 816380);
INSERT INTO options(serial no,option name,price) VALUES
(1, 'option1', 250000);
INSERT INTO options(serial no,option name,price) VALUES
(2, 'option2', 120000);
INSERT INTO options (serial no, option name, price) VALUES
(3, 'option3', 432000);
INSERT INTO options(serial no,option name,price) VALUES
(9, 'option4', 194000);
INSERT INTO options(serial no, option name, price) VALUES
(10, 'option5', 230000);
INSERT INTO options(serial no, option name, price) VALUES
(6, 'option6', 987000);
INSERT INTO options(serial no,option name,price) VALUES
(7, 'option7', 143700);
INSERT INTO options(serial no, option name, price) VALUES
(8, 'option8', 817350);
INSERT INTO salesperson(salesperson id,name,phone)
VALUES(1, 'John', 2222222222);
```

```
INSERT INTO salesperson(salesperson id, name, phone)
VALUES(2, 'Sia', 2435289762);
INSERT INTO salesperson(salesperson id,name,phone)
VALUES(3, 'Pop', 1234567898);
INSERT INTO salesperson(salesperson id,name,phone)
INSERT INTO salesperson(salesperson id, name, phone)
VALUES (5, 'Hela', 9394959697);
INSERT INTO salesperson(salesperson id, name, phone)
VALUES(6, 'Yuyu', 0192847663);
INSERT INTO salesperson(salesperson id, name, phone)
VALUES(7, 'Wener', 6123905000);
INSERT INTO sales(salesperson id, serial no, date, sale price) VALUES
(1,1,DATE'2001-09-1', 500000);
INSERT INTO sales(salesperson id, serial no, date, sale price) VALUES
(1,2,DATE'2002-02-12', 120000);
INSERT INTO sales(salesperson id, serial no, date, sale price) VALUES
(2,3,DATE'2004-06-15', 540000);
INSERT INTO sales(salesperson id, serial no, date, sale price) VALUES
(4,4,DATE'2012-08-15', 870000);
INSERT INTO sales(salesperson id, serial no, date, sale price) VALUES
(3,5,DATE'2008-03-2', 123000);
INSERT INTO sales(salesperson id, serial no, date, sale price) VALUES
(5, 6, DATE '2006-09-4', 532000);
INSERT INTO sales(salesperson id, serial no, date, sale price) VALUES
(7,7,DATE'2003-12-15', 570000);
INSERT INTO sales(salesperson id, serial no, date, sale price) VALUES
(6,8,DATE'2021-01-9', 572000);
INSERT INTO sales(salesperson id, serial no, date, sale price) VALUES
(7,9,DATE'1999-12-22', 510000);
INSERT INTO sales(salesperson id, serial no, date, sale price) VALUES
(1,10,DATE'1998-10-19', 123000);
select serial no, manufacturer, sale price
from (select
car.serial no,car.model,car.manufacturer,car.price,g.sale price from car
join (select sales.serial no,sales.sale price from sales
join salesperson
```

```
on sales.salesperson id=salesperson.salesperson id and
salesperson.name='John' ) g
on car.serial_no=g.serial_no) pp;
-- question 2
select serial_no, model
from car
where serial no
not in (select car.serial no from car join options on
car.serial_no=options.serial_no);
-- question 3
select sales.serial no, model, sale price
from sales
join (select
car.serial no,car.model,car.manufacturer,car.price,options.option name,opt
ions.price from car join options on car.serial no=options.serial no) g
on sales.serial no=g.serial no;
-- question 4
update salesperson
set phone=7227962460
where salesperson id=2;
```

```
postgres=# CREATE DATABASE cardetails;
CREATE DATABASE
postgres=# \c cardetails
You are now connected to database "cardetails" as user "postgres". cardetails=# \i /home/saloni/dbmslab/lab1_4.sql
CREATE TABLE
CREATE TABLE
CREATE TABLE
CREATE TABLE
INSERT 0 1
serial_no | manufacturer | sale_price
         1 | manufacturer1 |
                                    500000
         2 | manufacturer2 |
                                    120000
        10 | manufacturer10 |
                                    123000
(3 rows)
 serial_no | model
         4 | model4
         5 | model5
```

```
serial_no | model | sale_price
        1 | model1 |
                         500000
        2 | model2
                         120000
        3 | model3 |
                         540000
        6 | model6 |
                         532000
        7 | model7 |
                         570000
        8 | model8 |
                         572000
        9 | model9 |
                        510000
       10 | model10 |
                         123000
(8 rows)
UPDATE 1
cardetails=# select * from salesperson;
salesperson_id | name | phone
             1 | John | 222222222
             3 | Pop
                       1234567898
             4 | Bob | 8765656565
             5 | Hela | 9394959697
             6 | Yuyu | 192847663
             7 | Wener | 6123905000
             2 | Sia | 7227962460
(7 rows)
cardetails=#
```