

DBMS
LAB ASSIGNMENT
2014

SUBMITTED BY :
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12 CSS 57

```

create table vehicle57
(
    vcode varchar(10) primary key,
    vtype varchar(10),
    vcost int
);

create table spare57
(
    scode varchar(10) primary key,
    s_vtype varchar(10),
    cost int
);

create table dealer57
(
    dcode varchar(10) primary key,
    dname varchar(10),
    dloc varchar(10)
);

create table deals57
(
    vcode varchar(10),
    dcode varchar(10),
    vsold int,
    vsyear int,
    foreign key(vcode) references vehicle57(vcode)
    on update cascade on delete cascade,
    foreign key(dcode) references dealer57(dcode)
    on update cascade on delete cascade
);

create table keeps57
(
    dcode varchar(10),
    scode varchar(10),
    ssold int,
    syyear int,
    foreign key(dcode) references dealer57(dcode)
    on update cascade on delete cascade,
    foreign key(scode) references spare57(scode)
    on update cascade on delete cascade
);
insert into vehicle57 values('C800','CAR',400000);
insert into spare57 values('S1','CAR800',600);
insert into deals57 values('C800','D1',100,2006);
insert into keeps57 values('D1','S1',100,2006);
insert into dealer57 values('D1','ALPHA','KOLKATA');
insert into vehicle57 values('C1000','CAR',550000);
insert into vehicle57 values('J1200','JEEP',700000);
insert into spare57 values('S2','CAR800',800);
insert into spare57 values('S3','CAR1000',1500);
insert into spare57 values('S4','CAR1000',1000);
insert into spare57 values('S5','JEEP',2000);
insert into spare57 values('S6','JEEP',1900);
insert into deals57 values('C800','D1',200,2007);
insert into deals57 values('C1000','D1',350,2006);
insert into deals57 values('C1000','D1',250,2007);

```

```
insert into deals57 values('J1200','D1',200,2006);
insert into deals57 values('J1200','D1',50,2007);
insert into deals57 values('C800','D2',100,2006);
insert into deals57 values('C800','D2',600,2007);
insert into deals57 values('C1000','D2',450,2006);
insert into deals57 values('C1000','D2',700,2007);
insert into deals57 values('J1200','D2',300,2006);
insert into deals57 values('J1200','D2',400,2007);
insert into dealer57 values('D2','DELTA','DELHI');
insert into dealer57 values('D3','GAMMA','PURI');
insert into keeps57 values('D1','S1',300,2007);
insert into keeps57 values('D2','S1',300,2007);
insert into keeps57 values('D1','S2',200,2007);
insert into keeps57 values('D2','S2',400,2006);
insert into keeps57 values('D1','S3',40,2007);
insert into keeps57 values('D1','S3',150,2006);
insert into keeps57 values('D2','S3',400,2007);
insert into keeps57 values('D2','S3',700,2006);
insert into keeps57 values('D1','S4',150,2007);
insert into keeps57 values('D2','S4',200,2007);
insert into keeps57 values('D1','S4',800,2006);
insert into keeps57 values('D1','S5',100,2006);
insert into keeps57 values('D1','S5',300,2007);
insert into keeps57 values('D2','S5',300,2006);
insert into keeps57 values('D1','S6',250,2007);
insert into keeps57 values('D2','S6',350,2006);
insert into keeps57 values('D2','S6',550,2007);
```

```
mysql> select * from vehicle57;
```

```
+-----+-----+-----+
| vcode | vtype | vcost |
+-----+-----+-----+
| C1000 | CAR   | 550000 |
| C800  | CAR   | 400000 |
| J1200 | JEEP  | 700000 |
+-----+-----+-----+
```

```
3 rows in set (0.00 sec)
```

```
mysql> select * from dealer57;
```

```
+-----+-----+-----+
| dcode | dname | dloc   |
+-----+-----+-----+
| D1     | ALPHA | KOLKATA |
| D2     | DELTA | DELHI   |
| D3     | GAMMA | PURI    |
+-----+-----+-----+
```

```
3 rows in set (0.00 sec)
```

```
mysql> select * from deals57;
```

```
+-----+-----+-----+-----+
| vcode | dcode | vsold | vsyear |
+-----+-----+-----+-----+
| C800  | D1    | 200   | 2007   |
| C1000 | D1    | 350   | 2006   |
| C1000 | D1    | 250   | 2007   |
| J1200 | D1    | 200   | 2006   |
| J1200 | D1    | 50    | 2007   |
| C800  | D1    | 100   | 2006   |
| C800  | D2    | 100   | 2006   |
| C800  | D2    | 600   | 2007   |
| C1000 | D2    | 450   | 2006   |
| C1000 | D2    | 700   | 2007   |
| J1200 | D2    | 300   | 2006   |
| J1200 | D2    | 400   | 2007   |
+-----+-----+-----+-----+
```

```
12 rows in set (0.01 sec)
```

```
mysql> select * from spare57;
```

scode	s_vtype	cost
S1	CAR800	600
S2	CAR800	800
S3	CAR1000	1500
S4	CAR1000	1000
S5	JEEP	2000
S6	JEEP	1900

6 rows in set (0.00 sec)

```
mysql> select * from keeps57;
```

dcode	scode	ssold	syear
D1	S1	300	2007
D2	S1	300	2007
D1	S2	200	2007
D2	S2	400	2006
D1	S3	40	2007
D1	S3	150	2006
D2	S3	400	2007
D2	S3	700	2006
D1	S4	150	2007
D2	S4	200	2007
D1	S4	800	2006
D1	S5	100	2006
D1	S5	300	2007
D2	S5	300	2006
D1	S6	250	2007
D2	S6	350	2006
D2	S6	550	2007
D1	S1	100	2006

18 rows in set (0.00 sec)

Q1. List the dealer detail who has sold maximum number of cars in 2007.

```
select * from dealer57 where dcode = (select dcode from deals57 where vsyear = 2007 and vsold = (select max(vsold) from deals57 where vsyear = 2007));
```

```
mysql> select * from dealer57 where dcode = (select dcode from deals57 where vsyear = 2007 and vsold = (select max(vsold) from deals57 where vsyear = 2007));
+-----+-----+-----+
| dcode | dname | dloc |
+-----+-----+-----+
| D2    | DELTA | DELHI |
+-----+-----+-----+
1 row in set (0.02 sec)
```

Q2. List the vehicle details of that vehicle which is sold in minimum number in the year 2006.

```
select * from vehicle57 where vcode=(select vcode from deals57 where vsyear=2006 and vsold=(select min(vsold) from deals57 where vsyear=2006)limit 1);
```

```
mysql> select * from vehicle57 where vcode=(select vcode from deals57 where vsyear=2006 and vsold=(select min(vsold) from deals57 where vsyear=2006)limit 1);
+-----+-----+-----+
| vcode | vtype | vcost |
+-----+-----+-----+
| C800  | CAR   | 400000 |
+-----+-----+-----+
1 row in set (0.00 sec)
```

Q3. List the selling statistics of car in the year 2007.

```
select vehicle57.vcode,vehicle57.vtype,vehicle57.vcost,deals57.vsyear, sum(vsold) from vehicle57,deals57 where vehicle57.vcode=deals57.vcode and vsyear=2007 and vtype='CAR' group by vcode;
```

```
mysql> select vehicle57.vcode,vehicle57.vtype,vehicle57.vcost,deals57.vsyear, sum(vsold) from vehicle57,deals57 where vehicle57.vcode=deals57.vcode and vsyear=2007 and vtype='CAR' group by vcode;
+-----+-----+-----+-----+-----+
| vcode | vtype | vcost | vsyear | sum(vsold) |
+-----+-----+-----+-----+-----+
| C1000 | CAR   | 550000 | 2007   | 950        |
| C800  | CAR   | 400000 | 2007   | 800        |
+-----+-----+-----+-----+-----+
2 rows in set (0.00 sec)
```

Q4. List the selling statistics of dealer D2 in the year 2006.

select vehicle57.vcode,vehicle57.vtype,vehicle57.vcost,deals57.vyear,deals57.dcode,sum(vsold) from vehicle57,deals57 where vehicle57.vcode=deals57.vcode and deals57.dcode='D2' and deals57.vyear=2006 group by vcode;

```
mysql> select vehicle57.vcode,vehicle57.vtype,vehicle57.vcost,deals57.vyear,deals57.dcode,sum(vsold) from vehicle57,deals57 where vehicle57.vcode=deals57.vcode and deals57.dcode='D2' and deals57.vyear=2006 group by vcode;
```

vcode	vtype	vcost	vyear	dcode	sum(vsold)
C1000	CAR	550000	2006	D2	450
C800	CAR	400000	2006	D2	100
J1200	JEEP	700000	2006	D2	300

3 rows in set (0.00 sec)

Q5. List the earnings of company by selling JEEP in the year 2006.

select dealer57.dname,dealer57.dloc,deals57.dcode,vehicle57.vcost,(vehicle57.vcost*deals57.vsold) as total,sum(vsold) as untis from vehicle57,dealer57,deals57 where dealer57.dcode=deals57.dcode and vehicle57.vcode=deals57.vcode and vyear=2006 and deals57.vcode=(select vcode from vehicle57 where vtype='JEEP') group by dcode;

```
mysql> select dealer57.dname,dealer57.dloc,deals57.dcode,(vehicle57.vcost*deals57.vsold) as total,sum(vsold) as untis from vehicle57,dealer57,deals57 where dealer57.dcode=deals57.dcode and vehicle57.vcode=deals57.vcode and vyear=2006 and deals57.vcode=(select vcode from vehicle57 where vtype='JEEP') group by dcode;
```

dname	dloc	dcode	total	untis
ALPHA	KOLKATA	D1	140000000	200
DELTA	DELHI	D2	210000000	300

2 rows in set (0.00 sec)

Q6. List the spare details which the dealer D2 has not sold in the year 2007.

select spare57.s_vtype,spare57.scode,spare57.cost,keeps57.syear from spare57,keeps57 where keeps57.scode=spare57.scode and keeps57.scode NOT IN(select scode from keeps57 where dcode='D2' and syear=2007) and syear=2007;

```
mysql> select spare57.s_vtype,spare57.scode,spare57.cost,keeps57.syear from spare57,keeps57 where keeps57.scode=spare57.scode and keeps57.scode
NOT IN(select scode from keeps57 where dcode='D2' and syear=2007) and syear=2007;
+-----+-----+-----+-----+
| s_vtype | scode | cost | syear |
+-----+-----+-----+-----+
| CAR800  | S2    | 800  | 2007  |
| JEEP    | S5    | 2000 | 2007  |
+-----+-----+-----+-----+
2 rows in set (0.00 sec)
```

Q7. List the dealer detail who has sold more than 200 spares in the year 2006.

**select dealer57.dcode,dealer57.dname,dealer57.dloc,sum(ssold),sum(ssold)>200 from dealer57,keeps57
where dealer57.dcode=keeps57.dcode and syear=2007 group by dcode;**

```
mysql> select dealer57.dcode,dealer57.dname,dealer57.dloc,sum(ssold),sum(ssold)>200 from dealer57,keeps57 where dealer57.dcode=keeps57.dcode an
d syear=2007 group by dcode;
+-----+-----+-----+-----+-----+
| dcode | dname | dloc  | sum(ssold) | sum(ssold)>200 |
+-----+-----+-----+-----+-----+
| D1    | ALPHA | KOLKATA | 1240      | 1              |
| D2    | DELTA | DELHI  | 1450      | 1              |
+-----+-----+-----+-----+-----+
2 rows in set (0.01 sec)
```

Q8. List the vehicle code, vehicle cost, spare code and spare cost details of JEEP.

select vcode,vcost,scode,scost from vehicle57,spare57 where vtype=s_vtype and vtype='JEEP';

```
mysql> select vcode,vcost,scode,scost from vehicle57,spare57 where vtype=s_vtype and s_vtype='JEEP';
+-----+-----+-----+-----+
| vcode | vcost  | scode | cost |
+-----+-----+-----+-----+
| J1200 | 700000 | S5    | 2000 |
| J1200 | 700000 | S6    | 1900 |
+-----+-----+-----+-----+
2 rows in set (0.00 sec)
```

Q9. List the dealer name, spare cost and selling year of those spare parts which are sold in maximum number.

**select dname,cost,syear from keeps57,dealer57,spare57 where ssold in (select max(ssold) from keeps57
group by syear)
and keeps57.dcode = dealer57.dcode and keeps57.scode = spare57.scode;**


```
mysql> select dname,cost,year from keeps57,dealer57,spare57 where ssold in (select max(ssold) from keeps57 group by syear)
-> and keeps57.dcode = dealer57.dcode and keeps57.scode = spare57.scode;
+-----+-----+-----+
| dname | cost | year |
+-----+-----+-----+
| ALPHA | 1000 | 2006 |
| DELTA | 1900 | 2007 |
+-----+-----+-----+
2 rows in set (0.00 sec)
```

Q10. List the year wise total sale of that vehicle whose spare parts cost is maximum.

select dname,cost,year from spare57,dealer57,keeps57 where keeps57.scode in (select scode from keeps57 where ssold in (select max(ssold) from keeps57 group by syear)) and keeps57.scode=spare57.scode and keeps57.dcode=dealer57.dcode;

```
mysql> select vcode,vsyear,sum(vsold) from deals57 where vcode in (select vcode from vehicle57 where vtype in(select s_vtype from spare57 where cost in(select max(cost) from spare57))) group by vsyear;
+-----+-----+-----+
| vcode | vsyear | sum(vsold) |
+-----+-----+-----+
| J1200 | 2006 | 500 |
| J1200 | 2007 | 450 |
+-----+-----+-----+
2 rows in set (0.00 sec)
```

Q11. List the vehicle details sold by the Kolkata dealer.

select * from vehicle57 where vcode IN(select vcode from deals57 where dcode IN(select dcode from dealer57 where dloc='KOLKATA'));

```
mysql> select * from vehicle57 where vcode IN(select vcode from deals57 where dcode IN(select dcode from dealer57 where dloc='KOLKATA'));
+-----+-----+-----+
| vcode | vtype | vcost |
+-----+-----+-----+
| C1000 | CAR | 550000 |
| C800 | CAR | 400000 |
| J1200 | JEEP | 700000 |
+-----+-----+-----+
3 rows in set (0.00 sec)
```

Q12. List the total sale of JEEP.

select sum(vsold) as JEEP_SALE from deals57 where vcode IN(select vcode from vehicle57 where vtype='JEEP');

```
mysql> select sum(vsold) as JEEP_SALE from deals57 where vcode IN(select vcode from vehicle57 where vtype='JEEP');
+-----+
| JEEP_SALE |
+-----+
|      950 |
+-----+
1 row in set (0.00 sec)
```

Q13. List the total sale of car in the year 2007.

select sum(vsold) as sales from deals57 where vsyear=2007 and vcode IN(select vcode from vehicle57 where vtype='CAR');

```
mysql> select sum(vsold) as sales from deals57 where vsyear=2007 and vcode IN(select vcode from vehicle57 where vtype='CAR');
+-----+
| sales |
+-----+
|   1750 |
+-----+
1 row in set (0.00 sec)
```

Q14. List the year wise earning of the company by selling spare part S5.

select spare57.scode,spare57.cost,syear,sum(ssold),sum(ssold)*spare57.cost from spare57,keeps57 where spare57.scode=keeps57.scode and keeps57.scode='S5' group by syear;

```
mysql> select spare57.scode,spare57.cost,syear,sum(ssold),sum(ssold)*spare57.cost from spare57,keeps57 where spare57.scode=keeps57.scode and keeps57.scode='S5' group by syear;
+-----+-----+-----+-----+-----+
| scode | cost | syear | sum(ssold) | sum(ssold)*spare57.cost |
+-----+-----+-----+-----+-----+
| S5    | 2000 | 2006  | 400        | 800000                  |
| S5    | 2000 | 2007  | 300        | 600000                  |
+-----+-----+-----+-----+-----+
2 rows in set (0.00 sec)
```

Q15. List the total sales of the vehicles by the dealer ALPHA.

select dcode,vcode,sum(vsold) from deals57 where dcode IN(select dcode from dealer57 where dname='ALPHA') group by vcode;

```
mysql> select dcode,vcode,sum(vsold) from deals57 where dcode IN(select dcode from dealer57 where dname='ALPHA') group by vcode;
+-----+-----+-----+
| dcode | vcode | sum(vsold) |
+-----+-----+-----+
| D1    | C1000 |          600 |
| D1    | C800  |          300 |
| D1    | J1200 |          250 |
+-----+-----+-----+
3 rows in set (0.00 sec)
```

Q16. List the dealer details that is selling spare parts of CAR1000.

select * from dealer57 where dcode IN(select dcode from keeps57 where scode IN(select scode from spare57 where s_vtype='CAR1000'));

```
mysql> select * from dealer57 where dcode IN(select dcode from keeps57 where scode IN(select scode from spare57 where s_vtype='CAR1000'));
+-----+-----+-----+
| dcode | dname | dloc  |
+-----+-----+-----+
| D1    | ALPHA | KOLKATA |
| D2    | DELTA | DELHI  |
+-----+-----+-----+
2 rows in set (0.00 sec)
```

Q17. List the spare detail which was not sold by dealer D1 in the year 2006.

select * from spare57 where scode not in (select scode from keeps57 where syyear=2006 and dcode='D1');

```
mysql> select * from spare57 where scode not in (select scode from keeps57 where syyear=2006 and dcode='D1');
+-----+-----+-----+
| scode | s_vtype | cost |
+-----+-----+-----+
| S2    | CAR800  |    800 |
| S6    | JEEP    |   1900 |
+-----+-----+-----+
2 rows in set (0.00 sec)
```

-----END-----

