

# Lab Assignment-6



THAPAR INSTITUTE  
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(Deemed to be University)

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## Queries based on S,P and SP Tables

### S table -

SNO	SNAME	SCITY
1	S1	CHANDIGARH
2	S2	PAKISTAN
3	S3	BANGLADESH
4	S4	UP
5	S5	ENGLAND
6	S6	CHANDIGARH
7	S7	LAHORE
8	S8	BANGLADESH
9	S9	DELHI
10	S10	ENGLAND

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10 rows selected.

### P table -

PNO	PNAME	COLOR
11	P1	BLACK
12	P2	RED
13	P3	GREEN
14	P1	TINT
15	P2	BLACK
16	P4	RED
17	P2	BLACK
18	P1	ORANGE
19	P3	GREY
20	P4	BLACK

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10 rows selected.

## SP table –

SNO	PNO	QTY
1	12	100
2	15	150
2	11	190
3	14	130
4	13	170
5	11	190
7	14	130
8	15	150
9	12	100
10	11	170

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10 rows selected.

### 1. Display total no of suppliers supplying parts?

select count(\*) as "Total no of suppliers" from S;

Total no of suppliers
10

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### 2. Display the name of the supplier who supplies quantity greater than the average quantity supplied?

select sname,scity from S,P,SP where S.sno = SP.sno and P.pno=SP.pno and qty>(select avg(qty) from SP);

SNAME	SCITY
S2	PAKISTAN
S2	PAKISTAN
S4	UP
S5	ENGLAND
S8	BANGLADESH
S10	ENGLAND

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6 rows selected.

### 3. Display total quantity supplied by each supplier?

select sname,sum(qty) from S,SP where S.sno = SP.sno group by sname order by sname;

SNAME	SUM(QTY)
S1	100
S10	170
S2	340
S3	130
S4	170
S5	190
S7	130
S8	150
S9	100

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9 rows selected.

#### 4. Display part name & total quantity supplied for each part?

select pname,sum(qty) from P,SP where P.pno=SP.pno group by pname;

PNAME	SUM(QTY)
P2	500
P1	810
P3	170

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3 rows selected.

#### 5. Display total no of parts supplied by each supplier excluding suppliers of Patiala & also display only those suppliers who supply more than five (5) parts?

```
select SP.sno,count(*) from S,SP where scity <>'PATIALA' and S.sno = SP.sno group by SP.sno having count(*)>5
```

```
no data found
```

**6. For each part supplied get part number and names of all cities supplying the part.**

```
select DISTINCT pno,scity from SP,S where S.sno = SP.sno ;
```

PNO	SCITY
15	PAKISTAN
13	UP
11	PAKISTAN
14	LAHORE
12	CHANDIGARH
14	BANGLADESH
11	ENGLAND
15	BANGLADESH
12	DELHI

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9 rows selected.

**7. Get Qty supplied for Red parts.**

```
select sum(qty) total_qty from SP,P where P.pno = SP.pno and SP.pno in (select pno from P where color = 'RED');
```

TOTAL_QTY
200

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## 8. Get Sname supplying Red part.

select sname from S,P,SP where S.sno = SP.sno and P.pno=SP.pno and P.pno in (select pno from P where color = 'RED');

SNAME
S1
S9

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## 9. Get Sname, Pname who supply qty more than 100.

select sname,pname,qty from S,P,SP where S.sno = SP.sno and P.pno=SP.pno and qty>100 ;

SNAME	PNAME	QTY
S2	P1	190
S5	P1	190
S10	P1	170
S4	P3	170
S3	P1	130
S7	P1	130
S2	P2	150
S8	P2	150

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**10. Get all pairs of suppliers numbers such that the two suppliers are located in the same city.**

```
select t1.sname,t2.sname from S t1, S t2 where t2.sname in (select  
t2.sname from S t2 where t1.scity = t2.scity) and t1.sno<>t2.sno;
```

SNAME	SNAME
S1	S6
S3	S8
S5	S10

**11. Get Sname for suppliers who supply part P2.**

```
select sname from S,SP,P where S.sno = SP.sno and P.pno = SP.pno  
and pname = 'P2' ;
```

SNAME
S1
S2
S8
S9

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4 rows selected.

**12. Get Supplier numbers for suppliers who supply at least one part supplied by supplier S2.**

```
select DISTINCT S.sno from S,P,SP where S.sno = SP.sno and P.pno  
= SP.pno and SP.pno in (select pno from S,SP where S.sno = SP.sno  
and sname = 'S2') and S.sno <> 2;
```



SNO
8
5
10

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3 rows selected.

### 13. Get supplier names for suppliers who do not supply part P2.

select sname from S,SP,P where S.sno = SP.sno and P.pno = SP.pno  
and pname <> 'P2' ;

SNAME
S2
S3
S4
S5
S7
S10

[Download CSV](#)

6 rows selected.

### 14. Get suppliers numbers for suppliers who are located in same city as supplier S1.

select sno from S where scity = (select scity from S where sname='S1')  
and sno <> 1 ;

SNO
-----

6
---

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## Part 2 -----

ENAME	MGRNAME	EMPJOINING	MGRJOINING	DEPT
ROHAN	MANAN	25-MAR-20	16-AUG-19	IMMIGRATION
SAMIR	PANKAJ	28-SEP-18	29-JAN-20	SALES
AMAN	HARSH	17-APR-09	22-DEC-10	TECHNICAL

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### 15. Get ename and mgrname from emp table

select ename,mgrname from emp ;

ENAME	MGRNAME
ROHAN	MANAN
SAMIR	PANKAJ
AMAN	HARSH

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3 rows selected.

### 16. Get name of emp who join the company before their managers

select ename from emp where empjoining<mgrjoining;

ENAME
SAMIR
AMAN

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2 rows selected.

### 17. Get dname and ename also get those deptt which has no emp

select dept,ename from emp where ename = null ;

no data found

### 18. Get all possible parts which can be supplied by suppliers of patiala

select pname,sname from S,P,SP where S.sno = SP.sno and P.pno = SP.pno and S.scity = 'PATIALA';

no data found

### Code –

```
create table S(  
sno int primary key,  
sname varchar(20),  
scity varchar(20)  
);
```

```
insert into S values(1,'S1','CHANDIGARH');  
insert into S values(2,'S2','PAKISTAN');  
insert into S values(3,'S3','BANGLADESH');  
insert into S values(4,'S4','UP');  
insert into S values(5,'S5','ENGLAND');
```

```
insert into S values(6,'S6','CHANDIGARH');
insert into S values(7,'S7','LAHORE');
insert into S values(8,'S8','BANGLADESH');
insert into S values(9,'S9','DELHI');
insert into S values(10,'S10','ENGLAND');
```

```
select * from S order by sno asc;
```

```
create table P(
pno int primary key,
pname varchar(20),
color varchar(20)
);
```

```
insert into P values(11,'P1','BLACK');
insert into P values(12,'P2','RED');
insert into P values(13,'P3','GREEN');
insert into P values(14,'P1','TINT');
insert into P values(15,'P2','BLACK');
insert into P values(16,'P4','RED');
insert into P values(17,'P2','BLACK');
insert into P values(18,'P1','ORANGE');
insert into P values(19,'P3','GREY');
insert into P values(20,'P4','BLACK');
```

```
select * from P order by pno asc;
```

```
create table SP(
sno int references S(sno),
pno int references P(pno),
qty int,
primary key (sno,pno)
);
```

```
insert into SP values(1,12,100);
insert into SP values(2,15,150);
insert into SP values(4,13,170);
insert into SP values(5,11,190);
insert into SP values(7,14,130);
insert into SP values(9,12,100);
insert into SP values(8,15,150);
insert into SP values(10,11,170);
insert into SP values(2,11,190);
insert into SP values(3,14,130);
```

```
select * from SP order by sno asc;
```

```
select count(*) as "Total no of suppliers" from S;
```

```
select sname,scity from S,P,SP where S.sno = SP.sno and P.pno=SP.pno and  
qty>(select avg(qty) from SP);
```

```
select sname,sum(qty) from S,SP where S.sno = SP.sno group by sname order by  
sname;
```

```
select pname,sum(qty) from P,SP where P.pno = SP.pno group by pname;
```

```
select SP.sno,count(*) from S,SP where scity <>'PATIALA' and S.sno = SP.sno  
group by SP.sno having count(*)>5
```

```
select DISTINCT pno,scity from SP,S where S.sno = SP.sno ;
```

```
select sum(qty) total_qty from SP,P where P.pno = SP.pno and SP.pno in (select  
pno from P where color = 'RED');
```

```
select sname from S,P,SP where S.sno = SP.sno and P.pno=SP.pno and P.pno in  
(select pno from P where color = 'RED');
```

```
select sname,pname,qty from S,P,SP where S.sno = SP.sno and P.pno=SP.pno and  
qty>100 ;
```

```
select t1.sname,t2.sname from S t1, S t2 where t2.sname in (select t2.sname from S  
t2 where t1.scity = t2.scity) and t1.sno<>t2.sno;
```

```
select sname from S,SP,P where S.sno = SP.sno and P.pno = SP.pno and pname =  
'P2' ;
```

```
select DISTINCT S.sno from S,P,SP where S.sno = SP.sno and P.pno = SP.pno  
and SP.pno in (select pno from S,SP where S.sno = SP.sno and sname = 'S2') and  
S.sno <> 2;
```

```
select sname from S,SP,P where S.sno = SP.sno and P.pno = SP.pno and pname  
<> 'P2' ;
```

```
select sno from S where scity = (select scity from S where sname='S1') and sno <>  
1 ;
```

```
create table emp (  
ename varchar(25),  
mgrname varchar(25),  
empjoining date,  
mgrjoining date,  
dept varchar(25)  
);
```

```
insert into emp values('ROHAN','MANAN','25-MAR-2020','16-AUG-  
2019','IMMIGRATION');
```

```
insert into emp values('SAMIR','PANKAJ','28-SEP-2018','29-JAN-2020','SALES');
insert into emp values('AMAN','HARSH','17-APR-2009','22-DEC-
2010','TECHNICAL');
```

```
DESC emp;
select * from emp ;
```

```
select ename,mgrname from emp ;
```

```
select ename from emp where empjoining<mgrjoining;
```

```
select dept,ename from emp where ename = null ;
```

```
select pname,sname from S,P,SP where S.sno = SP.sno and P.pno = SP.pno and
S.scity = 'PATIALA';
```