Advance Database Management System Lab

Experiment- 3

To understand and use SQL Sub-Query

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Batch- 2

```sql
create database LAB_Experiment3;
use LAB_Experiment3;

create table Supplier(scode varchar(6) not null, sname varchar(45) not null,
scity varchar(50) not null, turnover decimal, primary key(scode));
create table Part(pcode varchar(6) not null, weight int not null, color
varchar(30) not null, cost decimal not null, selling_price decimal, primary
key(pcode));
create table Supplier_Part(scode varchar(6) not null, pcode varchar(6) not null,
qty int not null, primary key(scode, pcode),foreign key(scode) references
Supplier(scode), foreign key(pcode) references Part(pcode));

insert into Supplier values ('sup005', 'Amdah', 'San Diego', 1000000.50);
insert into Supplier values('sup001', 'White Stag', 'Delhi', 100000.00);
insert into Supplier values('sup010', 'Whitman', 'Denver', 500000.00 );
insert into Supplier values('sup101', 'Data General', 'Atlanta', 800000.00 );

insert into Part values('p00001', 50.00, 'pink', 10.50, 12.50);
insert into Part values('p00002', 1000.00, 'gray', 20.00, 32.00);
insert into Part values('p00003', 40.00, 'black', 685.00, 700.00);
insert into Part values('p00004', 5000.00, 'black', 450.00, 400.00);

insert into Supplier_Part values ('sup005', 'p00001', 150);
insert into Supplier_Part values('sup001', 'p00002', 500);
insert into Supplier_Part values('sup010', 'p00003', 45 );
insert into Supplier_Part values('sup101', 'p00004', 100 );

--Get the supplier number and part number in ascending order of supplier
number.
select scode, pcode from Supplier_Part order by pcode asc;
```

Output:

	scode	pcode
1	sup005	p00001
2	sup001	p00002
3	sup010	p00003
4	sup101	p00004

--Get the details of supplier who operate from Bombay with turnover 50.
select * from Supplier where scity='Bombay' and turnover=50;

Output:

scode	sname	scity	turnover

--Get the total number of supplier.
select count(scode) from Supplier;

Output:

	(No column name)
1	4

--Get the part number weighing between 25 and 35.
select pcode from Part where weight between 25 and 35;

Output:

pcode

--Get the supplier number whose turnover is null.
select scode from Supplier where turnover is null;

Output:

scode

--Get the part number that cost 20, 30 or 40 rupees.
select pcode from Part where cost=20 or cost=30 or cost=40;

Output:

	pcode
1	p00002

-- Get the total quantity of part 2 that is supplied.
select sum(qty) from Supplier_Part where pcode= 'p00002';

Output:

	(No column name)
1	500

--Get the name of supplier who supply part 2.
select * from Supplier select *from Supplier_Part select sname from Supplier, Supplier_Part where Supplier.scode=Supplier_Part.scode and Supplier_Part.pcode='p00002';

Output:

	scode	sname	scity	turnover
1	sup001	White Stag	Delhi	100000
2	sup005	Amdah	San Diego	1000001
3	sup010	Whitman	Denver	500000
4	sup101	Data General	Atlanta	800000

	scode	pcode	qty
1	sup001	p00002	500
2	sup005	p00001	150
3	sup010	p00003	45
4	sup101	p00004	100

--Get the part number whose cost is greater than the average cost.
select pcode from Part where cost>(select avg(cost) from Part);

Output:

	pcode
1	p00003
2	p00004

--Get the supplier number and turnover in descending order of turnover.
Select scode, turnover from Supplier order by scode, turnover desc;

Output:

	scode	turnover
1	sup001	100000
2	sup005	1000001
3	sup010	500000
4	sup101	800000