Final Exam

1. Using joins only, find the names of those suppliers that are located in London and supply a red part to a project located in Paris.

```
select s.sname from spj spj
join s on s.s# = spj.s#
join p on p.p# = spj.p#
join j on j.j# = spj.j#
where s.city ='London' and p.color = 'red' and j.city = 'Paris'
```

Query Result

SQL | All Rows Fetched: 1 in 0.004 seconds

	SNAME
1	Smith

2. Get all part names and their total quantity supplied where total quantity is more than 1000. Exclude from the total where quantity supplied is less than 100.

```
select p.pname,sum(spj.qty) total from
(select * from spj spj where qty >=100) spj

join p on p.p# = spj.p#

group by (spj.p#, p.pname)
having sum(spj.qty) >1000
```

Query Result

SQL | All Rows Fetched: 1 in 0.005 seconds

	PNAME	TOTAL
1	screw	3300

3. Find the names of suppliers who have supplied the most quantity.

```
SELECT * FROM(
select s.sname,sum(spj.qty) total from  spj spj

 join s on s.s# = spj.s#

 group by (spj.s#, s.sname)

order by sum(spj.qty) desc )WHERE ROWNUM=1
```

Query Result

SQL | All Rows Fetched: 1 in 0.014 seconds

	SNAME	TOTAL
1	Jones	3200

```
SELECT * FROM(
select s.sname,sum(spj.qty) total from  spj spj

 join s on s.s# = spj.s#

 group by (spj.s#, s.sname)

order by sum(spj.qty) desc )WHERE ROWNUM< =3
```

Query Result | Query Result 1

SQL | All Rows Fetched: 3 in 0.003 seconds

	SNAME	TOTAL
1	Jones	3200
2	Smith	900
3	Blake	700

4. Using sub-queries only (this means that no joins are allowed), get supplier names for those suppliers supplying parts located in the same city as the supply and to a project located in the same city as the supply.

```
select  s.sname from s s
where s.city in (select city from p p where p.city = s.city)
and s.city in (select city from j j where j.city = s.city)
and s.s# in (select spj.s# from spj)
```

Query Result

SQL | All Rows Fetched: 4 in 0.007 seconds

	SNAME
1	Jones
2	Blake
3	Smith
4	Clark

5. Get all the information for all the red parts order by the city where the parts are located first and then by weight.

```
 select * from p p
where p.color = 'red'

order by p.city, p.weight
```

Query Result

SQL | All Rows Fetched: 3 in 0.007 seconds

	P#	PNAME	COLOR	WEIGHT	CITY
1	p1	nut	red	12	London
2	p4	stapler	red	14	London
3	p6	cog	red	19	London

6. Using sub-queries only (correlated or non-correlated), find the names of those suppliers that are located in London and supply a red part to a project located in Paris.

```
select s.sname from s s
where s.s# in (select spj.s# from spj
where spj.p# in (select p.p# from  p where p.color = 'red')
and spj.j# in (select j.j# from j where j.city = 'Paris')
and spj.s# in ( select s.s# from s where s.city = 'London'))
```

Query Result

SQL | All Rows Fetched: 1 in 0.038 seconds

	SNAME
1	Smith

7. Use set operations and sub-queries, find the names of those suppliers who have not supplied anything.

```
select s.sname from s
minus

select  s.sname from s s
where s.s# in (select spj.s# from spj
where qty >0)
```

Query Result

SQL | All Rows Fetched: 1 in 0.005 seconds

	SNAME
1	Adams