

A)

```
select FNAME from EMPLOYEE  
order by FNAME asc;
```

#	FNAME
1	Ahmed
2	Alicia
3	Franklin
4	James
5	Jennifer
6	John
7	Joyce
8	Ramesh

B)

```
select DNAME,MAX(SALARY) as Max_salary from DEPARTMENT INNER JOIN EMPLOYEE  
on DEPARTMENT.DNUMBER = EMPLOYEE.DNO  
group by DNAME;
```

#	DNAME	Max_salary
1	Administration	43000
2	Headquarters	55000
3	Research	40000

C)

```
select DNAME,MIN(SALARY) as Max_salary from DEPARTMENT INNER JOIN EMPLOYEE  
on DEPARTMENT.DNUMBER = EMPLOYEE.DNO  
where DNUMBER != 1 group by DNAME;
```

#	DNAME	Max_salary
1	Administration	25000
2	Research	25000

D)

```
select distinct DNO as Availabe_Dno from DEPARTMENT INNER join EMPLOYEE  
on EMPLOYEE.DNO = DEPARTMENT.DNUMBER;
```

#	Availabe_Dno
1	1
2	4
3	5

E)

```
select DNO as Unavailable_Dno
from EMPLOYEE where DNO not in(select DNUMBER From DEPARTMENT);
```

#	Unavailable_Dno
---	-----------------

F)

```
select concat(FNAME," ",MINIT," ",LNAME) as Name,SALARY from EMPLOYEE
where SALARY >(select SALARY from EMPLOYEE where FNAME = 'John');
```

#	Name	SALARY
1	Franklin T Wong	40000
2	Ramesh K Narayan	38000
3	James E Borg	55000
4	Jennifer S Wallace	43000

G)

```
select concat(FNAME," ",MINIT," ",LNAME) as Name,SALARY from EMPLOYEE
where SALARY >(select MIN(SALARY) from EMPLOYEE where FNAME like "R%");
```

#	Name	SALARY
1	Franklin T Wong	40000
2	James E Borg	55000
3	Jennifer S Wallace	43000

H)

```
select concat(e.FNAME," ",e.MINIT," ",e.LNAME) as Employee_Name,
concat(m.FNAME," ",m.MINIT," ",m.LNAME) as Manager_Name
from EMPLOYEE e LEFT OUTER JOIN EMPLOYEE m on e.SUPER_SSN = m.SSN;
```

#	Employee_Name	Manager_Name
1	John B Smith	Franklin T Wong
2	Franklin T Wong	James E Borg
3	Joyce A English	Franklin T Wong
4	Ramesh K Narayan	Franklin T Wong
5	James E Borg	NULL
6	Jennifer S Wallace	James E Borg
7	Ahmed V Jabbar	Jennifer S Wallace
8	Alicia J Zelaya	Jennifer S Wallace

I)

```
select concat(e.FNAME," ",e.MINIT," ",e.LNAME) as Employee_Name,  
concat(m.FNAME," ",m.MINIT," ",m.LNAME) as Manager_Name  
from EMPLOYEE e RIGHT OUTER JOIN EMPLOYEE m on e.SUPER_SSN = m.SSN;
```

#	Employee_Name	Manager_Name
1	John B Smith	Franklin T Wong
2	Franklin T Wong	James E Borg
3	Joyce A English	Franklin T Wong
4	Ramesh K Narayan	Franklin T Wong
5	Jennifer S Wallace	James E Borg
6	Ahmed V Jabbar	Jennifer S Wallace
7	Alicia J Zelaya	Jennifer S Wallace
8	NULL	John B Smith
9	NULL	Joyce A English
10	NULL	Ramesh K Narayan
11	NULL	Ahmed V Jabbar
12	NULL	Alicia J Zelaya

J)

```
select concat(e.FNAME," ",e.MINIT," ",e.LNAME) as Employee_Name,  
concat(m.FNAME," ",m.MINIT," ",m.LNAME) as Manager_Name  
from EMPLOYEE e LEFT OUTER JOIN EMPLOYEE m on e.SUPER_SSN = m.SSN  
UNION  
select concat(e.FNAME," ",e.MINIT," ",e.LNAME) as Employee_Name,  
concat(m.FNAME," ",m.MINIT," ",m.LNAME) as Manager_Name  
from EMPLOYEE e RIGHT OUTER JOIN EMPLOYEE m on e.SUPER_SSN = m.SSN;
```

#	Employee_Name	Manager_Name
1	John B Smith	Franklin T Wong
2	Franklin T Wong	James E Borg
3	Joyce A English	Franklin T Wong
4	Ramesh K Narayan	Franklin T Wong
5	James E Borg	NULL
6	Jennifer S Wallace	James E Borg
7	Ahmed V Jabbar	Jennifer S Wallace
8	Alicia J Zelaya	Jennifer S Wallace
9	NULL	John B Smith
10	NULL	Joyce A English
11	NULL	Ramesh K Nara...
12	NULL	Ahmed V Jabbar
13	NULL	Alicia J Zelaya