```
SELECT Dname, Dnumber, Pnumber, Fname, Lname, Address, Bdate
FROM Employee, Department, Project
WHERE Plocation='Stafford
                          AND Dnum=Dnumber AND mgrssn=Ssn
Starfford konumunda bulunan projelerde calisan employeeler
SELECT *,Count(*)
FROM EMPLOYEE AS E, DEPARTMENT AS D
WHERE Dno=Dnumber
Group By Dnumber
select *,count(*)
from employee as e, dependent as d
where e.ssn=d.essn
group by fname
select *,count(*) as Employee Count
from project as p, works on as w
where p.pnumber=w.pno
group by pname
departmentdaki employee sayilari
employelerin bagimlilik sayilari
projelerdeki employee sayilari
select *,count(*) as Employee Count
from project as p, works on as w
where p.pnumber=w.pno
having count(*)>2
 ependent'i olmayan employeeleri getir.
Select DISTINCT Fname, Lname, Ssn, Address, Pno, Hours
FROM Employee as E left outer join Works_on as W on W.Essn=E.Ssn
Group By Fname
Aslinda kimin bir projede calismadigini gorebilecegim joinlenmis yapidir
Sebebi ise soldakilerin hepsini kosulsuz bas diyo olmamdandir.(LEFT OUTER
JOIN)
Essn=Ssn kosulunu saglayanlari bas ama sol tafarta bu kosulu saglama durumu
olmayan karsiligi NULL olan degerleri bile getir diyorum.
Ve elde edilen sonuctan Pno=null olanlari secip aslinda hic bir projede
calismayanlari gosterecegim
```

```
select DISTINCT Fname, Lname, Ssn, Address, Pno, Hours
FROM Employee as E left outer join Works on as W on W.Essn=E.Ssn
Group By Fname
NULL=NULL Avoided oldugu icin IS kullanarak yaptim.
Yani hic bir bilmem neyi olmayan gibi yapilari boyle bir mantik kullanarak
getirebilirim.
select DISTINCT Fname, Lname, Ssn, Address, Pno, Hours
FROM Employee as E left outer join Works on as W on W.Essn=E.Ssn
Group By Fname
20 NOLU PROJE DISINDA CALISANLAR BIRLESIM HIC BIRINDE CALISMAYANLAR
USING NOT
OUT OF SET
select * from employee where Employee.Ssn not in (select Essn
from employee as e,dependent as d
where e.Ssn=d.Essn)
Dependent'i olmayan employeeler
       Plocation='Bellaire' AND P.Dnum=D.Dnumber AND E.Ssn=D.Mgrssn AND
```

```
apervisor'in sahip oldugu alt employee sayisi
Housten'de
```

```
Tane dependent'i olan department managerlari
SELECT *,Count(*)
FROM Employee as E, Dependent as D, Department as Dept
WHERE E.Ssn=D.Essn AND Dept.Mgrssn=E.Ssn
Group By Fname
Dependent sayisi 1 olmayan department yoneticileri
Lname='Smith' olan kisinin
Department yoneticisi oldugu departmaninin projeleri
Normal isci olarak calistigi projeler
SELECT Pnumber
FROM Project
WHERE Pnumber IN
(SELECT Pnumber FROM Employee as E, Department as D , Project
 WHERE E.Dno=D.Dnumber AND E.Ssn=D.Mgrssn AND E.Lname='Smith')
 Pnumber IN
 (Select Pno FROM Works On, Employee Where Essn=Ssn AND Lname='Smith') Bu
      Project as P, Employee as E, Department as D, Works_on as W
E.Lname='Smith' AND ((E.Ssn=D.Mgrssn AND E.Dno=D.Dnumber) OR
o=P.Pnumber AND W.Essn=E.Ssn))
by Pnumber Bu smith'in department yoneticisi oldugu departmanin
projelerini listelemez
SELECT Pnumber
FROM Project
WHERE Pnumber IN
(SELECT Pnumber
FROM Employee as E, Department as D , Project as P
WHERE E.Dno=D.Dnumber AND E.Ssn=D.Mgrssn AND P.Dnum=D.Dnumber AND
E.Lname='Smith')
```

```
Pnumber IN
 (Select Pno FROM Works_On, Employee Where Essn=Ssn AND Lname='Smith') Bu
projelerini listeler cunku "P.Dnum=D.Dnumber" kosulunu ekledik.
SELECT *, Pnumber
FROM Project as P, Employee as E, Department as D, Works on as W
WHERE E.Lname='Smith' AND ((E.Ssn=D.Mgrssn AND P.Dnum=D.Dnumber) OR
(W.Pno=P.Pnumber AND W.Essn=E.Ssn))
Group by Pnumber
Bir employeenin yoneticisi oldugu department'i bulmak icin
                                       sn AND E.Lname='Smith' AND
 mith'in department yoneticiligi yaptigi departmanin sahip oldugu projeleri
listeler.
SELECT *
FROM Project as P, Employee as E, Works on as W, Department as D
WHERE E.Lname='Smith' AND ((E.Ssn=D.Mgrssn) OR (W.Essn=E.Ssn AND
W.Pno=P.Pnumber))
(SELECT DISTINCT Fname, Lname, Plocation, Pname, Pnumber
FROM PROJECT, DEPARTMENT, EMPLOYEE
WHERE DNUM=DNUMBER AND Mgrssn=Ssn AND Lname='Smith')
UNION
(SELECT DISTINCT Fname, Lname, Plocation, Pname, Pnumber
 FROM PROJECT, WORKS ON, EMPLOYEE
 WHERE Pnumber=Pno AND Essn=Ssn AND Lname='Smith')
 IKISIDE Lname=smith olan ve projelerde department yoneticisi veya normal
isci olarak calisilan
 proje nolarini getiriyor.
SELECT *
FROM Employee, Department
Order By Dname
Her ismin karsisina her dep'i yazar cunku castersien product
```

```
ELECT Fname, Employee.Lname, Address
ROM Employee, Department
HERE Department.Dname='Research' AND Department.Dnumber=Employee.Dno
esearch dep inde calisan employeeleri getir
 mployeenin supervisor'ini getir
Select *
From employee, department
Where Dname='Research' AND Dno=Dnumber
research departmanindaki employeeleri getirir.
Select *
From employee, department
Cartesien Product Employee and Department
select all salary
from employee
select distinct salary
from employee
Eliminate duplicate tuple
Select *
from Project, Employee, Works On
WHERE Works On.Essn=Employee.Ssn AND Project.Pnumber=Works On.Pno
Her proje icin o projede calisan employee bilgileri
Select Dno, Dname, Fname
FROM Employee, Department
Where Department.Dnumber=Employee.Dno
departmendaki employeeler
Select Dno, Dname, Fname, Pname, Ssn, Pno
```

```
FROM Employee, Department, Works On, Project
Where Department.Dnumber=Employee.Dno AND Works On.Pno=Project.Pnumber AND
Employee.Ssn=Works On.Essn
RELAX VERSION
Select Dno, Dname, Fname, Pname, Ssn, Pno
FROM Employee, Department, Works on, Project
Where Department.Dnumber=Employee.Dno AND Works_on.Pno=Project.Pnumber AND
Employee.Ssn=Works on.Essn
departmendaki employeelerin calistigi projeler
(Select DISTINCT Pnumber
FROM Project as P, Department as D, Employee as E
WHERE P.Pnumber=D.Dnumber AND D.Mgr ssn=E.Ssn AND E.Lname='Smith')
UNION
(Select DISTINCT Pnumber
FROM Project as P,Employee as E,Works on as W
WHERE P.Pnumber=W.Pno AND E.Ssn=W.Essn AND E.Lname='Smith'
Select *
FROM Employee
WHERE Address Like '%Hous%'
Select *
FROM Employee
Where (Salary between 30000 and 60000)
Select Fname, Lname, Address, Pnumber, Pname, Salary*1.1 as Increased S
FROM Employee as E, Project as P, Works on as W
WHERE P.Pname='
                 roductX' AND E.Ssn=W.Essn AND P.Pnumber=W.Pno
ProductX isimli projede calisan employeelerin maaslarinin zamli halleri
getiriliyor.
Select DISTINCT Fname, Lname, Address, Salary*1.1 as Increased S
FROM Employee as E, Project as P, Works on as W
WHERE E.Ssn=W.Essn AND P.Pnumber=W.Pno
ORDER BY Fname Asc
Projelerde calisan employeelerin maaslarinin zamli halleri getiriliyor.
```

```
Select * from Employee
where Super_ssn is null
Yonetici
Select * from Employee
where Super ssn is not null
Yonetici haric
Select DISTINCT Pnumber, Pname, Plocation, Dnum
FROM Project
WHERE Pnumber IN
(Select Pnumber FROM Project, Department, Employee WHERE Mgrssn=Ssn AND
Dno=Dnumber AND Lname='Smith')
OR
Pnumber IN
FROM Works on as W, Employee as E
WHERE W.Essn=E.Ssn AND E.Lname='Smith'
Lname=Smith olan kisinin yonettigi departmandaki projelerin
  Lname=Smith olan kisinin calistigi projelerin
  BIRLESIMINDE BULUNAN Projeler icinde bulunan projeleri getir
SELECT Fname, Lname
FROM Employee AS E, Dependent AS D
WHERE E.Fname=D.Dependent name AND E.Sex=D.Sex AND E.Ssn=D.Essn
Select E.Fname, E.Lname
FROM Employee as E
WHERE E.Ssn IN
(SELECT Essn
FROM DEPENDENT D
WHERE D.Dependent_name=E.Fname AND D.Sex=E.Sex
Dependent'i olan
    ndent'inin ismicinsiyeti ayni olanlari getir.
```

```
Select Fname, Lname
FROM Employee
WHERE Exists(Select * from Dependent as D Where Ssn=D.Essn )
Select DISTINCT Fname, Lname from Employee as E, Dependent as D Where
E.Ssn=D.Essn
Dependent'i olan employeeler
SELECT Pnumber, Pname
FROM Project as P, Department as D
WHERE P.Dnum=D.Dnumber AND D.Dnumber=5
5 nolu department tarafindan kontrol edilen projeler
SELECT Pnumber, Pname, E. Fname, E. Lname
FROM Project as P, Department as D, Employee as E, Works on as W
WHERE P.Dnum=D.Dnumber AND D.Dnumber=5 AND E.Ssn=W.Essn AND P.Pnumber=W.Pno
5 nolu department tarafindan kontrol edilen projelerde calisan
employeelerin hepsi
FROM Employee AS E
WHERE Not Exists((Select Pnumber FROM Project WHERE Dno=5) EXCEPT(Select
pno FROM works on as W WHERE E.Ssn=W.Essn))
```

```
AYNISININ DIGER GOSTERIMI
SELECT Lname, Fname
FROM Employee
WHERE NOT EXISTS
        (SELECT Pnumber FROM Project WHERE Dnum=5
C.Pno=B.Pno)
SELECT DISTINCT Essn
FROM Works on
WHERE Pno in (1,2,3)
Order BY Essn
1,2,3 nolu projelerde calisan employee essn leri
SELECT DISTINCT Essn, Fname, Lname, Pno
FROM Works on as W, Employee as E, Project as P
WHERE Pno in (1,2,3) AND W.Pno=P.Pnumber AND W.Essn=E.Ssn
ORDER BY Ssn Asc
1,2,3 nolu projelerde calisan Employeele
Select E.Fname AS Emp Fname, E.Lname AS Emp Lname, S.Fname AS
Sup Fname, S. Lname AS Sup Lname
FROM Employee as E, Employee as S
WHERE E.Superssn=S.Ssn
Select E.Fname AS Emp_Fname, E.Lname AS Emp_Lname, S.Fname AS
Sup_Fname, S.Lname AS Sup_Lname, E.Ssn AS E_Ssn, S.Ssn AS Sup_Ssn
FROM Employee as E, Employee as S
WHERE E.Superssn=S.Ssn
Employeelerin yoneticileri
SELECT Fname, Lname, Address
```

```
FROM (Employee as E JOIN Department as D ON E.Dno=D.Dnumber)
SELECT Fname, Lname, Address
FROM (Employee as E JOIN Department as D WHERE E.Dno=D.Dnumber) YANLIs
SELECT E.Fname, E.Lname, S.Fname, S.Lname
FROM Employee as E LEFT OUTER JOIN Employee as S
ON E.Superssn=S.Ssn
ORDER BY S.Lname Asc
Select Pname, Pnumber
FROM ((Project JOIN Department ON Dnum=Dnumber))
WHERE Plocation='S
Stafford bolgesinde bulunan projeler
Select Fname, Lname, Pnumber, Address, Bdate, Ssn
FROM ((Project JOIN Department ON Dnum=Dnumber) JOIN Employee ON
Marssn=Ssn)
WHERE Plocation='Stafford'
Stafford bolgesinde bulunan projelerde calisan employeeler arasindan o
departmanin yoneticisi
olani getir
FARKLI VERSIYONLAR
FROM Project as P,Department as D,Employee as E,Works on as W
WHERE Plocation='Stafford' AND P.Dnum=D.Dnumber AND E.Ssn=D.Mgrssn AND
W.Essn=E.Ssn
SELECT DISTINCT Fname, Lname, Pnumber, Address, Bdate
FROM Project as P, Department as D, Employee as E, Works on as W
WHERE Plocation='Stafford' AND P.Dnum=D.Dnumber AND E.Ssn=D.Mgrssn AND
W.Essn=E.Ssn
Aggregate Functions
SELECT SUM(Salary) as Maaslar Toplami, MAX(Salary) as
En Yuksek Maas, AVG (Salary) as Ortalama Maas
FROM Employee
En_Yuksek_Maas, AVG(Salary) as Ortalama_Maas
FROM (Employee JOIN DEPARTMENT ON Dno=Dnumber)
WHERE Dname='
```

```
SELECT *
FROM Employee as E, Department as D
WHERE E.Dno=D.Dnumber
SELECT COUNT(*)
FROM Employee as E, Department as D
WHERE E.Dno=D.Dnumber
SELECT COUNT(*)
FROM (EMPLOYEE as E JOIN DEPARTMENT as D)
WHERE E.Dno=D.Dnumber AND D.Dname='
SELECT COUNT(*)
FROM Employee as E, Department as D
WHERE E.Dno=D.Dnumber AND D.Dname='Research'
GROUP BY
Select Dno,Count(*) as Toplam Isci,AVG(Salary)
FROM Employee as E, Department as D
WHERE E.Ssn=D.Mgrssn
select *,Count(*)
from employee as e, dependent as d
where e.Ssn=d.Essn
group by Fname
order by Fname
HER Employee'nin sahip oldugu dependent sayisini veriyor.
select Dname, AVG(Salary)
FROM Department as D, Employee as E
Where D.Dnumber=E.Dno
HER GRUBUNUN CALISANLARININ TOPLAM MAASLARINI ALIYOR.
select *,COUNT(*)
from Department AS D, Employee AS E
WHERE D.Dnumber=E.Dno
Group By dname
Her departmanda calisan toplam isci sayisini veriyor.
select Pnumber, Pname, COUNT(*)
from Project as P, Works_on as W, Employee as E
where P.Pnumber=W.Pno AND E.Ssn=W.Essn
group by pnumber,pname
```

```
Select Pnumber, Pname, Count(*)
From (project join works_on)
Where Pno=Pnumber
group by Pnumber, Pname
HER PROJENIN KARSISINA ORADA KAC ISCI CALISIYOR YAZ
Select *,Count(*)
From ((project as p join works on as w on w.Pno=p.Pnumber) join employee as
e on e.Ssn=w.Essn)
Where Pno=Pnumber
group by Pnumber, Pname
Yukaridakinin aynisi
HAVING
Select Pnumber, Pname, Count(*)
From (project join works_on)
Where Pno=Pnumber
group by Pnumber, Pname
 taneden fazla calisani olan projeler
select *,COUNT(*)
from Department AS D, Employee AS E
WHERE D.Dnumber=E.Dno
 taneden fazla calisani olan departmentlari buluyor.
select Dname, AVG(Salary)
FROM (Department as D JOIN Employee as E ON D.Dnumber=E.Dno)
select Dname, AVG(Salary)
FROM Department as D, Employee as E
Where D.Dnumber=E.Dno
Group By Dname
HER GRUBUNUN CALISANLARININ TOPLAM MAASLARINI ALIYOR.
select *
FROM Department as D, Employee as E
WHERE D.Dnumber=E.Dno
Her departman icin ayri ayri o departmanda kimin calistigini yazar.
```

```
Select *,COUNT(*)
FROM Department as D, (select * from Employee where salary>40000) as E_Temp
Where D.Dnumber=E Temp.Dno
Departmentlari icerisindeki employeelerin 40.000 den fazla maas iceren
durumlarina gore grupla
Ve bu departmentlar icin bu kosulda kac employee var karsisina yaz.
Elmasrinin Sundugu cozum (NULL Gosteriyor)
Select Dnumber, COUNT(*)
FROM Department, Employee
where Dnumber=Dno AND Salary>40000 AND (select Dno from Employee Group By
Dno Having COUNT(*)>5)
Benim cozumum
FROM Department as D, (select * from Employee where salary>=40000) as E_Temp
Where D.Dnumber=E Temp.Dno
With BigDepts(Dno) AS (select dno from employee group by dno having
Select *,Count(*)
FROM Employee
Where Salary>40000 AND Dno IN BigDepts
Group by dno HATALI
```