

Query: List Name of emp who work in depts located in 'Stafford' or 'Bellaire'.

Select Name

from Emp

where Dno IN

(Select Dnumber
from Dept-Location
where Dlocation = 'Stafford' or
Dlocation = 'Bellaire') ;

→ {4, 5}

Select Name

from Emp, DeptLoc

where (Dlocation = 'Stafford' or
Dlocation = 'Bellaire')
and Dno = Dnumber

Emp X DeptLoc

40 rows

Query: List emp Name without dependents.

Select Name

from Emp

where SSN NOT IN

(Select essn from Dependent) ;

↓

{3334, 9876, 1234}

Query: List emp (Name) who don't work on any projects.

Select Name

from Emp

where SSN NOT IN

(Select essn from workon) ;

Query: Select emp with dependents who have the same first name.

```
Select Frame
from Emp
where SSN IN
( Select ESSN
  from Dependent
  where Dependent-name = Frame );
```

Query: Select emp who have dependents of the same sex.

```
Select Frame, Dependent-name
from Emp E, Dependent D
where E.Sex = D.Sex and SSN = ESSN;
```

```
Select Frame, Dependent-nameX
from Emp E
where SSN IN
```

```
( Select ESSN
  from Dependent D
  where D.sex = E.sex );
```

1234 ∈

{3334,
9876,
1234}

↓
→ {9998} ∉ {3334, 1234}

Query: Select projects where 'wong' is worker or manager.

Select Pnumber
from Project
where Pnumber ~~IN~~ ~~NOT IN~~ {1, 2, 3, 10, 20, 30}

(Select Pnumber
from Proj, Dept, Emp
where (mgrssn = ssn and
Lname = 'wong' and dname = Dnumber)

~~AND~~

~~OR~~

Pnumber ~~IN~~ ~~NOT IN~~

(Select Pno
from works on, Emp
where (Essn = ssn and Lname = 'wong'));

Query: ~~Select projects where 'wong' is NOT
a worker nor a manager.~~

Pnumber {1, 2, 3, 10, 20, 30}

~~NOT IN~~

{1, 2, 3}

~~NOT IN~~

{10, 20, 30}

{2, 3, 10, 20}

{1, 30}

{1, 10, 20, 30}

```
Select Pnumber  
from Project  
where Pnumber NOT IN
```

(

```
Select Pnumber  
from Project, Department, Employee  
where (mgr_ssn = ssn and  
       lname = 'wong' and  
       Dname = Dnumber)
```

UNION

```
Select Pno  
from works-on, Emp  
where (Essn = ssn and Lname = 'wong')  
);
```

Is this correct?

Select Pnumber
from Project
where Pnumber IN

(Select Pnumber
from Proj, Dept, Emp
where (mgrssn = ssN and
Lname <> 'woong' and dname = Dnember)

AND

~~OR~~ Pnumber IN

(Select Pno
from works-on, Emp
where (Essn = ssN and Lname <> 'woong'));