PES UNIVERSITY, RR CAMPUS

DBMS LAB WEEK 7 – SET QUERIES

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SECTION: 'A'

1. Create the database and DDL.

```
postgres=# \i 'C:/Users/anany/Desktop/3rd Year College/DBMS Lab/Week7/companyddl.sql'
DROP DATABASE
CREATE DATABASE
You are now connected to database "company" as user "postgres".
CREATE TABLE
COMPANY=#
```

2. Populate the Database.

```
company=# \l 'C:/Users/anany/Desktop/3rd Year College/DBMS Lab/Week7/company_Insert.sql'
You are now Connected to database "company" as user "postgres".
ALTER TABLE
INSERT 0 1
```

3. Implement commands

```
company=# (SELECT DISTINCT PNUMBER
company(# FROM PROJECT, DEPARTMENT, EMPLOYEE
company(# WHERE DNUM = DNUMBER AND MGR_SSN = SSN AND LNAME = 'Smith')
company-# UNION
company-# (SELECT DISTINCT PNUMBER
company(# FROM PROJECT, WORKS_ON, EMPLOYEE
company(# WHERE PNUMBER = PNO AND ESSN = SSN AND LNAME = 'Smith');
pnumber
------
1
2
(2 rows)
```

```
company=# SELECT FNAME, MINIT, LNAME FROM EMPLOYEE WHERE SSN NOT IN ((SELECT SSN FROM EMPLOYEE) INTERSECT (SELECT ESSN FROM DEPENDENT));
fname | minit | lname

James | E | Borg
Alicia | J | Zelaya
Ramesh | K | Narayan
Joyce | A | English
Ahmed | V | Jabbar
(5 rows)
```

```
company=# SELECT SSN FROM EMPLOYEE WHERE DNO=5
company-# UNION
company-# SELECT SUPER_SSN FROM EMPLOYEE WHERE DNO=5;
ssn
------
123456789
333445555
453453453
666884444
888665555
(5 rows)
```

```
company=# (SELECT PNUMBER FROM PROJECT WHERE DNUM=5)
company-# INTERSECT
company-# (SELECT PNO FROM WORKS_ON WHERE Essn='123456789');
pnumber
-----
1
2
(2 rows)
```

```
company=# (SELECT SSN FROM EMPLOYEE WHERE DNO=5)
company-# EXCEPT
company-# (SELECT E.SSN FROM EMPLOYEE E, PROJECT P, WORKS_ON W WHERE P.PLOCATION='Bellaire' AND W.PNO=P.PNUMBER AND W.ESSN=E.SSN);
ssn
-------
666884444
333445555
(2 rows)
```

```
company=# (SELECT FNAME FROM EMPLOYEE)
company-# INTERSECT
company-# (SELECT DEPENDENT_NAME FROM DEPENDENT);
fname
-----
(0 rows)
```