CUNY MSDA - IS607 : DATA ACQUISITION AND MANAGEMENT
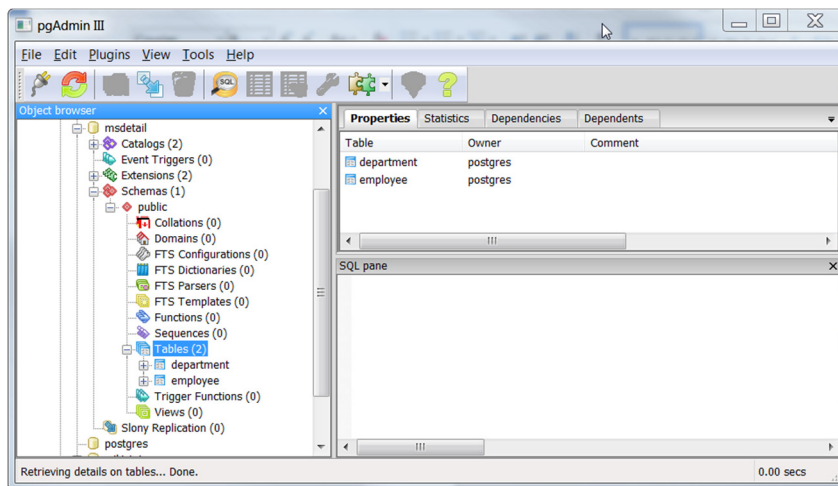
Week 7 Assignment

A. Leopold HILLAH

Creation of a new database and master/detail table

Creation of **msdetail** database.

```
CREATE DATABASE msdetail
  WITH OWNER = postgres
       ENCODING = 'UTF8'
       TABLESPACE = pg_default
       LC_COLLATE = 'English_United Kingdom.1252'
       LC_CTYPE = 'English_United Kingdom.1252'
       CONNECTION LIMIT = -1;
```


2. Creation of two tables with a one-to-many relationship

```
CREATE TABLE DEPARTMENT
(
  DEPID character varying,
  DEPNAME character varying,
  DEPADDR character varying,
  CONSTRAINT DEP_PK PRIMARY KEY (DEPID)
)
WITH (
  OIDS=FALSE
);
ALTER TABLE DEPARTMENT
  OWNER TO postgres;


CREATE TABLE EMPLOYEE
(
  EMPID character varying,
  DEPID character varying,
  EMPNAME character varying,
  GENDER character varying,
  SALARY numeric,
  CONSTRAINT EMP_PK PRIMARY KEY (EMPID),
  CONSTRAINT EMPLOYEE_DEPARTMENT_ID_FKEY FOREIGN KEY (DEPID)
      REFERENCES DEPARTMENT (DEPID) MATCH SIMPLE
      ON UPDATE CASCADE ON DELETE RESTRICT
)
WITH (
  OIDS=FALSE
);
ALTER TABLE EMPLOYEE
  OWNER TO postgres;
```

3. Creation of two tables with a one-to-many relationship

```
INSERT INTO DEPARTMENT VALUES ('D01', 'SALES', 'EG01-02');
INSERT INTO DEPARTMENT VALUES ('D02', 'IT', 'EG01-02');
INSERT INTO DEPARTMENT VALUES ('D03', 'HR', 'EG01-02');
INSERT INTO DEPARTMENT VALUES ('D04', 'RISK', NULL);

COMMIT;
```

```
INSERT INTO EMPLOYEE VALUES ('E01', 'D01', 'JOHN DOE', 'JOHNNY', 'MALE',35000);
INSERT INTO EMPLOYEE VALUES ('E02', 'D04', 'JILL HILL', NULL, 'FEMALE', 42000);
INSERT INTO EMPLOYEE VALUES ('E03', 'D03', 'PETE MILL', NULL, 'MALE', 41000);
INSERT INTO EMPLOYEE VALUES ('E04', 'D02', 'SARAH RICKS', 'SAR', 'FEMALE', 60000);
INSERT INTO EMPLOYEE VALUES ('E05', 'D03', 'ROGER JOHNSON', NULL, 'MALE', 51000);
INSERT INTO EMPLOYEE VALUES ('E06', 'D02', 'RICHARD FORD', 'RICK', 'MALE', 62000);
INSERT INTO EMPLOYEE VALUES ('E07', 'D01', 'LEILA PETERS', 'L.A.', 'FEMALE', 44000);
INSERT INTO EMPLOYEE VALUES ('E08', 'D04', 'ANTHONY BAILEY', NULL, 'MALE', 338000);

COMMIT;
```

4. Creation of two tables with a one-to-many relationship

```
SELECT * FROM EMPLOYEE A, DEPARTMENT B
WHERE A.DEPID = B.DEPID
AND B.DEPNAME = 'IT';
```

```
SELECT * FROM EMPLOYEE A, DEPARTMENT B
WHERE A.DEPID = B.DEPID
AND NICKNAME IS NOT NULL;
```

5. Entity-Relationship Diagram