Week 7 Assignment
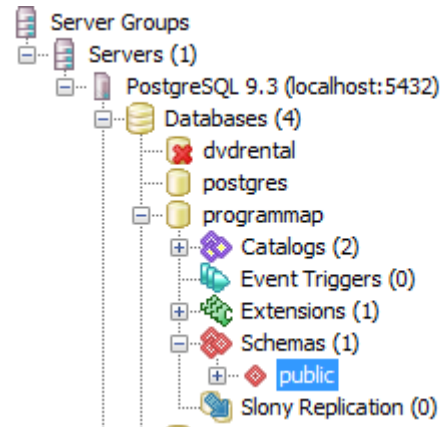
#1 Create Database

new database named programmap

#2 Create Tables

CREATE TABLE programs(
    prog_id SERIAL PRIMARY KEY,
    program_name VARCHAR,
    acctexec VARCHAR);

CREATE TABLE projects (
    proj_id SERIAL PRIMARY KEY,
    proj_name VARCHAR,
    program_id INT,
    wbs_code CHAR(7),
    change_order INT,
    startdate DATE,
    enddate DATE,
CONSTRAINT program_fk FOREIGN KEY (program_id)
    REFERENCES programs (prog_id));

#3 Insert Data

INSERT INTO programs(program_name, acctexec)
VALUES
    ('National Labratory', 'Joe Swindler'),
    ('Neverending Claims Program', 'Ignor Failure')
    ('New Program', 'TBD');

INSERT INTO projects(proj_name, program_id, wbs_code, change_order, startdate, enddate)
VALUES
    ('Lab Systems', 1, 'KT12345', 1, '2008-01-01', '2014-12-31'),
    ('Lab NICE', 1, 'KT55642', 0, '2009-04-12', '2013-09-30'),
    ('Claims Systems', 1, 'KTIGNOR', 3, '2004-03-01', '2015-12-31'),
    ('Claims Nextgen lbr', 2, 'KT99998', 0, '2013-01-01', '2017-12-31')
    ('Claims Hawaii', 2, 'KT99998', NULL, '2014-01-01', '2018-12-31');

	prog_id [PK] serial	program_nan character vai	acctexec character vai
1	1	National La	Joe Swindle
2	2	Neverending	Ignor Failu
3	3	New Program	TBD
*			

	proj_id [PK] serial	proj_name character vai	program_id integer	wbs_code character(7)	change_orde integer	startdate date	enddate date
1	1	Lab Systems	1	KT12345	1	2008-01-01	2014-12-31
2	2	Lab NICE	1	KT55642	0	2009-04-12	2013-09-30
3	3	Claims Syst	1	KTIGNOR	3	2004-03-01	2015-12-31
4	4	Claims Next	2	KT99998	0	2013-01-01	2017-12-31
5	6	Claims Hawa	2	KT99998		2014-01-01	2018-12-31
*							

#4 Joins

Inner Join

SELECT program_name, proj_name, wbs_code
FROM projects
INNER JOIN programs ON prog_id = program_id
WHERE wbs_code IS NOT NULL;

	Data Output	Explain	Messages	History	

	program_name character varying	proj_name character varying	wbs_code character(7)
1	National Labratory	Lab Systems	KT12345
2	National Labratory	Lab NICE	KT55642
3	National Labratory	Claims Systems	KTIGNOR
4	Neverending Claims Program	Claims Nextgen lbr	KT99998
5	Neverending Claims Program	Claims Hawaii	KT99998

Left Join

SELECT program_name, acctexec, proj_name, startdate
FROM programs
LEFT JOIN projects ON prog_id = program_id;

	Data Output	Explain	Messages	History

	program_name character varying	acctexec character varying	proj_name character varying	startdate date
1	National Labratory	Joe Swindler	Lab Systems	2008-01-01
2	National Labratory	Joe Swindler	Lab NICE	2009-04-12
3	National Labratory	Joe Swindler	Claims Systems	2004-03-01
4	Neverending Claims Program	Ignor Failure	Claims Nextgen lbr	2013-01-01
5	Neverending Claims Program	Ignor Failure	Claims Hawaii	2014-01-01
6	New Program	TBD		

Self Join

SELECT A.proj_name AS project_ending,
       A.enddate AS project_ends,
       B.proj_name AS project_starting,
       B.startdate AS project_starts
FROM projects A, projects B
WHERE A.enddate < B.startdate;

	Data Output	Explain	Messages	History

	project_ending character varying	project_ends date	project_starting character varying	project_starts date
1	Lab NICE	2013-09-30	Claims Hawaii	2014-01-01

#5 ER diagram