

Interactive - 13 - drop both tables

Let's try getting rid of our 2 tables. Our first attempt to do this will fail.

```
drop table if exists us_state;
```

We have a dependency via foreign constraint on us_state. That is name_list.

We can do this in order - or we can use an option to “cascade” the drops. “cascade” is powerful but dangerous. In PostgreSQL it will drop the table and associated constraints. In Oracle it cascades to the tables referenced!

```
DROP table if exists name_list;  
DROP table if exists us_state;
```

Now use the supplied script to re-create the tables. There will be some additional columns when you do this that we will use in future homework exercises.

The files are hw13_4.sql, hw13_5.sql, hw13_6.sql, hw13_7.sql - run the entire set. The files are shown below. After you have run the file do the select to see a table of the states.

```
DROP TABLE if exists name_list cascade ;  
DROP TABLE if exists us_state cascade ;
```

```
CREATE TABLE us_state (  
    state_id        UUID NOT NULL DEFAULT uuid_generate_v4() primary key,  
    state_name      text NOT NULL,  
    state           char varying (2) NOT NULL,  
    FIPS_code       char varying (2) NOT NULL,  
    area_rank       int not null default 9999,  
    area_sq_mi      numeric not null default 0,  
    population      int not null default 0,  
    fed_area        int  not null default 0,  
    gdp_growth      float null default 0.0,  
    gdp             float null default 0.0  
);
```

```
CREATE UNIQUE INDEX us_state_uidx1 on us_state ( state );
```

```
INSERT INTO us_state  
    ( state_name,          state,  FIPS_code,  population, area_rank, area_sq_mi, fed_ar  
    ( 'Alabama',          'AL',    '01' ,    4903185,      25,      50750,      6,  
    ( 'Alaska',           'AK',    '02' ,    731545,       1,      570641,     12,  
    ( 'Arizona',          'AZ',    '04' ,    7278717,      6,      113642,     12,  
    ( 'Arkansas',         'AR',    '05' ,    3017825,     27,      52075,      8,  
    ( 'California',       'CA',    '06' ,    39512223,     3,      155973,     12,
```

```

( 'Colorado',      'CO',    '08' ,    5758736,      8,    103730,    10,
( 'Connecticut',   'CT',    '09' ,    3565387,     48,     4845,     1,
( 'Delaware',      'DE',    '10' ,     973764,     50,     1955,     3,
( 'District of Columbia', 'DC',    '11' ,     705749,     52,      137,     5,
( 'Florida',       'FL',    '12' ,    21477737,    26,    53997,     6,
( 'Georgia',       'GA',    '13' ,    10617423,    21,    57919,     6,
( 'Hawaii',        'HI',    '15' ,    1415872,    47,     6423,    12,
( 'Idaho',         'ID',    '16' ,    1787065,    11,    82751,    12,
( 'Illinois',      'IL',    '17' ,    12671821,   24,    55593,     7,
( 'Indiana',       'IN',    '18' ,    6732219,   38,    35870,     7,
( 'Iowa',          'IA',    '19' ,    3155070,   23,    55875,     7,
( 'Kansas',        'KS',    '20' ,    2913314,   13,    81823,    10,
( 'Kentucky',      'KY',    '21' ,    4467673,   36,    39732,     8,
( 'Louisiana',     'LA',    '22' ,    4648794,   33,    43566,    11,
( 'Maine',         'ME',    '23' ,    1344212,   39,    30865,     1,
( 'Maryland',      'MD',    '24' ,    6045680,   42,     9775,     5,
( 'Massachusetts', 'MA',    '25' ,    6949503,   45,     7838,     1,
( 'Michigan',      'MI',    '26' ,    9986857,   22,    56539,     7,
( 'Minnesota',     'MN',    '27' ,    5639632,   14,    79617,     9,
( 'Mississippi',   'MS',    '28' ,    2976149,   31,    46914,     6,
( 'Missouri',      'MO',    '29' ,    6137428,   18,    68898,     8,

```

```
;
```

```
INSERT INTO us_state
```

```

( state_name,      state,  FIPS_code,  population,  area_rank,  area_sq_mi,  fed_area
( 'Montana',      'MT',    '30' ,    1068778,      4,    145556,      9,
( 'Nebraska',     'NE',    '31' ,    1934408,     15,     76878,     10,
( 'Nevada',       'NV',    '32' ,    3080156,      7,    109806,     12,
( 'New Hampshire', 'NH',    '33' ,    1359711,     44,     8969,      1,
( 'New Jersey',   'NJ',    '34' ,    8882190,     46,     7419,      5,
( 'New Mexico',   'NM',    '35' ,    2096829,      5,    121365,    11,
( 'New York',     'NY',    '36' ,    19453561,    30,     47224,      2,
( 'North Carolina', 'NC',    '37' ,    10488084,    29,     48718,      5,
( 'North Dakota', 'ND',    '38' ,      762062,    17,     68994,      9,
( 'Ohio',         'OH',    '39' ,    11689100,    35,     40953,      4,
( 'Oklahoma',     'OK',    '40' ,    3956971,    19,     68679,    10,
( 'Oregon',       'OR',    '41' ,    4217737,    10,     96003,    12,
( 'Pennsylvania', 'PA',    '42' ,    12801989,    32,     44820,      4,
( 'Puerto Rico',  'PR',    '72' ,    3194000,    49,      3515,      2,
( 'Rhode Island', 'RI',    '44' ,    1059361,    51,      1034,      1,
( 'South Carolina', 'SC',    '45' ,    5148714,    40,    30111,      5,
( 'South Dakota', 'SD',    '46' ,      884659,    16,     75898,      9,
( 'Tennessee',    'TN',    '47' ,    6833174,    34,     41220,      6,
( 'Texas',        'TX',    '48' ,    28995881,     2,    261914,    11,
( 'Utah',         'UT',    '49' ,    3205958,    12,     82168,    12,
( 'Vermont',      'VT',    '50' ,      623989,    43,      9249,      1,

```

```

( 'Virginia',          'VA',      '51' ,      8535519,      37,      39598,      5,
( 'Virgin Islands',    'VI',      '78' ,      106977,      53,      68,      12,
( 'Washington',        'WA',      '53' ,      7614893,      20,      66582,      12,
( 'West Virginia',     'WV',      '54' ,      1792147,      41,      24087,      5,
( 'Wisconsin',         'WI',      '55' ,      5822434,      25,      54314,      7,
( 'Wyoming',           'WY',      '56' ,      578759,      9,      97105,      10,
;

```

```

CREATE TABLE name_list (
    name_list_id UUID NOT NULL DEFAULT uuid_generate_v4() primary key,
    real_name text check ( length(real_name) >= 1 ) not null,
    age int check ( age > 0 and age < 154 ) not null,
    state char varying (2) not null,
    pay numeric(10,2)
);

```

```

CREATE INDEX name_list_idx1 on name_list ( real_name );
CREATE INDEX user_real_name_ci_idx1 ON name_list ((lower(real_name)));

```

```

ALTER TABLE name_list
    ADD CONSTRAINT name_list_state_fk
    FOREIGN KEY (state)
    REFERENCES us_state (state)
;

```

```

INSERT INTO name_list ( real_name, age, state, pay ) values
( 'Bob True',          22, 'WY', 31000 ),
( 'Jane True',         20, 'WY', 28000 ),
( 'Tom Ace',           31, 'NJ', 82500 ),
( 'Steve Pen',         33, 'NJ', 89400 ),
( 'Laura Jean Alkinoos', 34, 'PA', 120000 ),
( 'Philip Schlump',    62, 'WY', 101200 ),
( 'Liz Tribune',       30, 'WY', 48000 ),
( 'Lary Smith',        58, 'NJ', 48000 ),
( 'Dave Dave',        21, 'NJ', 48000 ),
( 'Laura Ann Alkinoos', 34, 'PA', 48000 )
;

```

You should have both states and territories with square miles.

```
SELECT * from us_state;
```

Tags: “reload data”, “drop cascade”

Validate: SQL-Select, “select ‘PASS’ from (select count(1) as cnt from us_state) as foo where foo.cnt = 53”

FilesToRun: hw13__4.sql

FilesToRun: hw13__5.sql

FilesToRun: hw13__6.sql

FilesToRun: hw13__7.sql