Second Part of SQL Create Tables and Adjust Tables

# COVID\_COUNTS\_2020\_2021\_BY\_STATE - TABLE

## Add column – period\_begin\_year

--https://www.w3schools.com/sql/sql\_alter.asp

--https://stackoverflow.com/questions/794371/alter-table-add-column-syntax

ALTER TABLE covid\_counts\_2020\_2021\_by\_state

ADD COLUMN period\_begin\_year INT

## Add column – period\_begin\_month

--https://www.w3schools.com/sql/sql\_alter.asp

--https://stackoverflow.com/questions/794371/alter-table-add-column-syntax

ALTER TABLE covid\_counts\_2020\_2021\_by\_state

ADD COLUMN period\_begin\_month INT

## Add column – period\_begin\_month\_year

--https://www.w3schools.com/sql/sql\_alter.asp

--https://stackoverflow.com/questions/794371/alter-table-add-column-syntax

ALTER TABLE covid\_counts\_2020\_2021\_by\_state

ADD COLUMN period\_begin\_month\_year VARCHAR

## Fill/Update period\_begin\_month column

UPDATE covid\_counts\_2020\_2021\_by\_state

SET period\_begin\_month = date\_part('month', date)

## Fill/Update period\_begin\_year column

UPDATE covid\_counts\_2020\_2021\_by\_state

SET period\_begin\_year = date\_part('year', date)

## Fill/Update period\_begin\_month\_year column

UPDATE covid\_counts\_2020\_2021\_by\_state

SET period\_begin\_month\_year = CONCAT(period\_begin\_month, '-', period\_begin\_year)

## Add column – housing\_month\_year\_state

--https://www.w3schools.com/sql/sql\_alter.asp

--https://stackoverflow.com/questions/794371/alter-table-add-column-syntax

ALTER TABLE covid\_counts\_2020\_2021\_by\_state

ADD housing\_month\_year\_state VARCHAR

## Add column – state\_code

ALTER TABLE covid\_counts\_2020\_2021\_by\_state

ADD state\_code VARCHAR (2)

## Update/Fill state\_code column

-- https://stackoverflow.com/questions/2763817/sql-update-fields-of-one-table-from-fields-of-another-one

UPDATE covid\_counts\_2020\_2021\_by\_state b

SET state\_code = a.state\_two\_letter\_abbreviation

FROM states a

WHERE a.state\_name\_title\_case = b.state;

## Update/Fill state\_code\_column

UPDATE covid\_counts\_2020\_2021\_by\_state

SET housing\_month\_year\_state = CONCAT(period\_begin\_month\_year, state\_code)

## Rename column from ‘housing\_month\_year\_state’ to ‘covid\_month\_year\_state’

--https://stackoverflow.com/questions/33022706/alter-a-column-name-in-a-view-in-postgresql#comment53868034\_33022706

ALTER TABLE covid\_counts\_2020\_2021\_by\_state RENAME COLUMN housing\_month\_year\_state to covid\_month\_year\_state

## Add Primary Key to ‘states’ Table

ALTER TABLE states ADD PRIMARY KEY (State\_two\_letter\_abbreviation); -- does not work as cannot use as a primary key as duplicated

## Drop Columns

-- https://stackoverflow.com/questions/13474537/how-to-drop-multiple-columns-in-postgresql

ALTER TABLE covid\_counts\_2020\_2021\_by\_state

DROP COLUMN county,

DROP COLUMN fips,

DROP COLUMN period\_begin\_month,

DROP COLUMN period\_begin\_year,

DROP COLUMN period\_begin\_month\_year;

## Create Table – covid\_counts\_by\_state\_by\_month

Create table covid\_counts\_by\_state\_by\_month as (

select period\_begin\_month, period\_begin\_year, period\_begin\_month\_year, state, state\_code, covid\_month\_year\_state, sum(cases) as cases, sum(deaths) as deaths

from covid\_counts\_2020\_2021\_by\_state

group by period\_begin\_month, period\_begin\_year, period\_begin\_month\_year, state, state\_code, covid\_month\_year\_state

order by covid\_month\_year\_state

)

## Add Primary Key to ‘covid\_month\_year\_state’ Table

ALTER TABLE states ADD PRIMARY KEY (covid\_month\_year\_state);

## Add Foreign Key to ‘covid\_month\_year\_state’ Table

-- https://stackoverflow.com/questions/10389477/sql-add-foreign-key-to-existing-column

ALTER TABLE covid\_counts\_by\_state\_by\_month

ADD FOREIGN KEY (state\_code)

REFERENCES states(state\_two\_letter\_abbreviation)

# HOUSING\_DATA\_2020\_2021\_BY\_STATE

## Create Table – housing\_data\_2020\_2021\_by\_state

Create table housing\_data\_2020\_2021\_by\_state as (

select \*

from housing\_data

where period\_begin >= '2020-01-01'

and state\_code in ('CA', 'FL', 'WA', 'TX', 'MN')

)

## Table Column – period\_begin\_month\_year

--https://www.w3schools.com/sql/sql\_alter.asp

--https://stackoverflow.com/questions/794371/alter-table-add-column-syntax

ALTER TABLE housing\_data\_2020\_2021\_by\_state

ADD period\_begin\_month\_year varchar

## Table Column – date

ALTER TABLE covid\_counts\_2020\_2021\_by\_state

DROP COLUMN county,

## Table Column – period\_begin\_month

--https://www.w3schools.com/sql/sql\_alter.asp

--https://stackoverflow.com/questions/794371/alter-table-add-column-syntax

ALTER TABLE housing\_data\_2020\_2021\_by\_state

ADD period\_begin\_month int

## Table Column – period\_begin\_ year

--https://www.w3schools.com/sql/sql\_alter.asp

--https://stackoverflow.com/questions/794371/alter-table-add-column-syntax

ALTER TABLE housing\_data\_2020\_2021\_by\_state

ADD period\_begin\_year int

## Update/Fill period\_begin\_year

UPDATE housing\_data\_2020\_2021\_by\_state

SET period\_begin\_year = date\_part('year', period\_begin)

## Update/Fill period\_begin\_month

UPDATE housing\_data\_2020\_2021\_by\_state

SET period\_begin\_month = date\_part('month', period\_begin)

## Update/Fill period\_begin\_month\_year

UPDATE housing\_data\_2020\_2021\_by\_state

SET period\_begin\_month\_year = CONCAT(period\_begin\_month, '-', period\_begin\_year)

## Add Column – housing\_month\_year\_state

ALTER TABLE housing\_data\_2020\_2021\_by\_state

ADD housing\_month\_year\_state VARCHAR

## Update/Fill – housing\_month\_year\_state

UPDATE housing\_data\_2020\_2021\_by\_state

SET housing\_month\_year\_state = CONCAT(period\_begin\_month\_year, state\_code)

## Drop Columns

-- https://stackoverflow.com/questions/13474537/how-to-drop-multiple-columns-in-postgresql

ALTER TABLE housing\_data\_2020\_2021\_by\_state

DROP COLUMN period\_end,

DROP COLUMN period\_duration,

DROP COLUMN region\_type,

DROP COLUMN region\_type\_id,

DROP COLUMN table\_id,

DROP COLUMN is\_seasonally\_adjusted,

DROP COLUMN region,

DROP COLUMN city,

DROP COLUMN median\_sale\_price\_mom,

DROP COLUMN median\_sale\_price\_yoy,

DROP COLUMN median\_list\_price\_mom,

DROP COLUMN median\_list\_price\_yoy,

DROP COLUMN median\_ppsf\_mom,

DROP COLUMN median\_ppsf\_yoy,

DROP COLUMN median\_list\_ppsf\_mom,

DROP COLUMN median\_list\_ppsf\_yoy,

DROP COLUMN homes\_sold\_mom,

DROP COLUMN homes\_sold\_yoy,

DROP COLUMN pending\_sales\_mom,

DROP COLUMN pending\_sales\_yoy,

DROP COLUMN new\_listings\_mom,

DROP COLUMN new\_listings\_yoy,

DROP COLUMN inventory\_mom,

DROP COLUMN inventory\_yoy,

DROP COLUMN months\_of\_supply\_mom,

DROP COLUMN months\_of\_supply\_yoy,

DROP COLUMN median\_dom\_mom,

DROP COLUMN median\_dom\_yoy,

DROP COLUMN avg\_sale\_to\_list\_mom,

DROP COLUMN avg\_sale\_to\_list\_yoy,

DROP COLUMN sold\_above\_list\_mom,

DROP COLUMN sold\_above\_list\_yoy,

DROP COLUMN price\_drops\_mom,

DROP COLUMN price\_drops\_yoy,

DROP COLUMN off\_market\_in\_two\_weeks\_mom,

DROP COLUMN off\_market\_in\_two\_weeks\_yoy,

DROP COLUMN last\_updated;

## Drop Columns

-- https://stackoverflow.com/questions/13474537/how-to-drop-multiple-columns-in-postgresql

ALTER TABLE housing\_data\_2020\_2021\_by\_state

DROP COLUMN off\_market\_in\_two\_weeks,

DROP COLUMN parent\_metro\_region,

DROP COLUMN parent\_metro\_region\_metro\_code;

## Create table – housing\_data\_by\_state\_by\_month

Create table housing\_data\_by\_state\_by\_month as (

select period\_begin\_month, period\_begin\_year, period\_begin\_month\_year, state, state\_code, housing\_month\_year\_state, sum(median\_sale\_price) as median\_sale\_price,

sum(median\_list\_price) as median\_list\_price, sum(median\_ppsf) as median\_ppsf, sum(median\_list\_ppsf) as median\_list\_ppsf, sum(homes\_sold) as homes\_sold,

sum(pending\_sales) as pending\_sales, sum(new\_listings) as new\_listings, sum(inventory) as inventory, sum(months\_of\_supply) as months\_of\_supply,

sum(median\_dom) as median\_dom, sum(avg\_sale\_to\_list) as avg\_sale\_to\_list, sum(sold\_above\_list) as sold\_above\_list, sum(price\_drops) as price\_drops

from housing\_data\_2020\_2021\_by\_state

group by period\_begin\_month, period\_begin\_year, period\_begin\_month\_year, state, state\_code, housing\_month\_year\_state

order by housing\_month\_year\_state

);

## Drop Columns

-- https://stackoverflow.com/questions/13474537/how-to-drop-multiple-columns-in-postgresql

ALTER TABLE housing\_data\_by\_state\_by\_month

DROP COLUMN median\_sale\_price,

DROP COLUMN median\_list\_price,

DROP COLUMN median\_ppsf,

DROP COLUMN median\_list\_ppsf,

DROP COLUMN median\_dom,

DROP COLUMN avg\_sale\_to\_list;

## Add Primary Key to ‘housing\_data\_by\_state\_by\_month’ Table

ALTER TABLE housing\_data\_by\_state\_by\_month ADD PRIMARY KEY (housing\_month\_year\_state);

## Add Foreign Key to ‘housing\_data\_by\_state\_by\_month’ Table

ALTER TABLE housing\_data\_by\_state\_by\_month

ADD FOREIGN KEY (state\_code)

REFERENCES states(state\_two\_letter\_abbreviation)

# Drop Tables

--https://stackoverflow.com/questions/4202135/how-to-drop-multiple-tables-in-postgresql-using-a-wildcard

DROP TABLE housing\_data, us\_counties\_2020, us\_counties\_2021, covid\_counts\_2020\_2021\_by\_state, housing\_data\_2020\_2021\_by\_state;