Interactive - 16 - count matching rows in a select

You can count stuff that is grouped. This turns out to be very useful.

Suppose that we want to know how many states are in a group and the sum of the population in the group.

```
SELECT
       fed_area,
       round(avg(gdp_growth)::numeric,2)::text||'%' as avg_growth,
       sum(population) as sum_population,
       count(state) as no_of_states,
       string_agg(state, ',' ORDER BY state) as  state_list
   FROM us_state
   GROUP BY fed_area
   ORDER BY 2 desc
;
```

You should get 12 rows order by decreasing average growth.

Take Away

1. You can count the number of rows in the group with count.
2. You can order by a column position this is the "2 desc".
3. The function round() takes a numeric argument - but the output of avg() is a double precision float. A type cast is used.
4. You can convert from the numeric result of round to text with a "::text" type cast - then add the '%' to show it is a percentage.

Book

- group by - page 120 to 121
- avg - 64
- order by - page 15, 16

Tags: "group by","avg","order by"

Validate: SQL-Select,"select 'PASS' as x"