ORDERED SET FUNCTIONS
Syntax

- `select p, percentile_cont(p) within group (order by x::float8) from`
WHAT

- Median
- Dense_rank
- Essentially, analytical tools
- User defined functions
Types

• Inverse Distribution Functions – percentile_cont, percentile_disc
• Hypothetical Rank Functions -- dense_rank, percent_rank
Want Details?

- SQL Standard
- Needs another lightening talk
percentile_disc

- select p, percentile_cont(p) within group (order by x::float8) from generate_series(1,5) x,
  (values (0::float8),(0.1),(0.25),(0.4),(0.5),(0.6),
  (0.75),(0.9),(1)) v(p)
group by p order by p;
### percentile_disc example

<table>
<thead>
<tr>
<th>p</th>
<th>percentile_cont</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>0.1</td>
<td>1.4</td>
</tr>
<tr>
<td>0.25</td>
<td>2</td>
</tr>
<tr>
<td>0.4</td>
<td>2.6</td>
</tr>
<tr>
<td>0.5</td>
<td>3</td>
</tr>
<tr>
<td>0.6</td>
<td>3.4</td>
</tr>
<tr>
<td>0.75</td>
<td>4</td>
</tr>
<tr>
<td>0.9</td>
<td>4.6</td>
</tr>
<tr>
<td>1</td>
<td>5</td>
</tr>
</tbody>
</table>

(9 rows)
dense_rank

- select dense_rank(3) within group (order by x) from (values (1),(1),(2),(2),(3),(3),(4)) v(x);
dense_rank continued

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3

(1 row)
Status

- Under review by Vik Fearing and Pavel Stehule
- Hope to go into 9.4