

S06-L01 Analytic functions

- MySQL
 - hmmm... not many, but we can learn to simulate them (yay!)
 - See User-defined functions in C/C++ to enhance MySQL <http://mysql-udf.sourceforge.net/>
- PostgreSQL
 - `ROW_NUMBER()`
 - `RANK()` , `DENSE_RANK()`
 - `LAG()` , `LEAD()`
 - `FIRST_VALUE()` , `LAST_VALUE()`

```
SELECT /* in PostgreSQL */
  letter,
  ROW_NUMBER() OVER(ORDER BY letter),
  RANK()       OVER(ORDER BY letter),
  DENSE_RANK() OVER(ORDER BY letter),
  PERCENT_RANK() OVER(ORDER BY letter),
  NTILE(10) OVER(ORDER BY letter),
  FIRST_VALUE(letter) OVER(),
  LAST_VALUE(letter) OVER(),
  NTH_VALUE(letter, 3) OVER(ORDER BY letter),
  LAG(letter) OVER(),
  LEAD(letter) OVER()
FROM sample.test
ORDER BY letter
;
```