Introduction to SQL

Selecting columns

- 记住，在SQL里面，没有所谓的""，只能用单引号。

命令	解释
SELECT name,fuck FROM people	select some column
SELECT 'SQL is cool!' AS result;	as variable result
SELECT * FROM xxx	Select all
SELECT xx FROM xx LIMIT xxx	limit several lines
SELECT DISTINCT xx FROM xxx	select distinct things
SELECT COUNT(*) FROM xxx	Count the lines

Filtering Rows

命令	解释
<>	Not Equal Operator
SELECT xx FROM xx WHERE xx>=10 AND xxx<=12	filtering
BETWEEN	>10 AND <12 is Between 10 AND 12
SELECT xxx FROM xx WHERE xx IS NULL	select and filter where's null

命令	解释
SELECT xxx FROM xx WHERE xx IS NOT NULL	select and filter where's not null
SELECT x FROM x WHERE x LIKE 'Data%';	$ stands for multiple characters, like * in shell
SELECT x FROM x WHERE x LIKE "_DATA"	_stands for single character, like ? in shell

Aggregate Functions

命令	解释
SELECT AVG(budget) FROM films;	Find Average
SELECT MAX(budget) FROM films;	Find Maximun
SELECT SUM(budget) FROM films;	Find Sum
SELECT (4.0 / 3.0) AS result;	It's different from 4/3 since it's double
SELECT xxAS a FROM xx;	Let the selected things as a column name

Sorting and grouping

- 记住，出现了groupby一定会有count这类的aggregation，如果用aggregation的结果进行filter就要用HAVING

命令	解释
SELECT xx FROM xx ORDER BY xx (DESC)	a line is used for sorting (can be descending)
SELECT xx FROM xx ORDER BY a DESC,b	can be sorted by 2 columns, one desc and one asc
SELECT xx,COUNT(xx) FROM xx GROUP BY xx	a grouby in SQL
SELECT xx FROM x GROUP BY xx HAVING COUNT(x)	IF things need to be filtered have aggregation, we need to use Having for filter