

CheatSheet: SQL & MySql

LANGUAGES

- PDF Link: [cheatsheet-mysql-A4.pdf](#), Category: languages
- Blog URL: <https://cheatsheet.dennyzhang.com/cheatsheet-mysql-A4>
- Related posts: CheatSheet: shell, #denny-cheatsheets

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1.1 SQL Problems

Name	Problem
Use having with group-by	group by class having count(distinct student)>4 Leetcode: Class
Update records with case clause	set sex = case when sex = 'm' then 'f' else 'm' end LeetCode:
Sum with case	sum(case when state = 'approved' then 1 else 0 end) LeetCode:
Subquery	where (customer_id, order_date) in (select ... LeetCode: Imme
Sql isnull and if	if(s1.id%2=0, s1.student, if(isnull(s2.student), s1.student,
round float	(round(accepts/requests, 2) Leetcode: Friend Requests I: Overall Ac
Rank score	(select @rank := 0, @prev := -1) as rows LeetCode: Rank Scores
Select clause add an incremental id	select (@cnt1 := @cnt1 + 1) as id LeetCode: Students Report By Geogr
MySQL DATE _{SUB}	DATE_SUB(record_date, INTERVAL 6 DAY)
Get accumulated sum for each group	LeetCode: Last Person to Fit in the Elevator
nth element in each group	LeetCode: Nth Highest Salary
topn entris for each group	LeetCode: Department Top Three Salaries
union vs union all	LeetCode: Friend Requests II: Who Has the Most Friends
Convert float to int	cast(amount as SIGNED)
If no match show null	LeetCode: Second Highest Salary
Get maximum of multiple columns	LeetCode: Triangle Judgement
Tree hierachy in SQL	LeetCode: All People Report to the Given Manager
Impressive sql problems	Leetcode: Find Median Given Frequency of Numbers, LeetCode: Consec
Impressive sql problems	LeetCode: Rank Scores, LeetCode: Exchange Seats, LeetCode: Students
mysql doesn't support full outer join	LeetCode: Monthly Transactions II
When left join+groupby, group by which tables' field?	LeetCode: Team Scores in Football Tournament
sum(if(isnull(vs ifnull(sum(LeetCode: Team Scores in Football Tournament
Three tables' inner join	LeetCode: Students and Examinations
Find Continuous Ranges	Find the Start and End Number of Continuous Ranges
Reference	Leetcode SQL problems

1.2 SQL Statement

Name	Command
Select with regexp in where clause	select * from expenses where date regexp '2013-0[4-5]' limit 2;
Select with like in where clause	select * from expenses where date like '2013-0%' limit 2;
Select unix timestamp	select unix_timestamp(createtime) from expenses limit 1;
Offset limit	select * from student limit 4 offset 9
Use replace function	UPDATE tb1 SET f1=REPLACE(f1, 'abc', 'def');
Use if function	select Db, IF(IFNULL(User, "")="", DB, User) from db;

1.3 Mysql Packages

Name	Command
Install mysql server	apt-get install mysql-server
Install mysql client	apt-get install mysql-client libmysqlclient-dev, yum install mysql-devel
Install python mysql library	easy_install mysql-python

1.4 DB Management

Name	Command
mysql connect	<code>mysql -u\$username -p\$password -P\$port -h\$dbhost \$dbname</code>
database encoding	<code>set names utf8;</code>
List databases	<code>show databases;</code>
List tables for current db	<code>show tables;</code>
Check table definition	<code>describe \$tablename;</code>
Run sql in non-interactive way	<code>mysql -uUSER -pPASSWORD databasename -e "select * from t lin</code>
Import db	<code>mysql -uUSER -pPASSWORD dbname < backup.sql</code>
export db	<code>mysqldump -uUSER -pPASSWORD DATABASE > backup.sql</code>
export db without schema	<code>mysqldump -uUSER -pPASSWORD DATABASE --no-data=true --add-d</code>
Grant access	<code>GRANT SUPER ON 'DBNAME'.'user' TO 'DBUSER'@'%'</code>
Add column	<code>ALTER TABLE expenses ADD COLUMN createtime timestamp not nul</code>
Delete Column	<code>ALTER TABLE expenses DROP COLUMN createtime;</code>
Delete index	<code>DROP INDEX indexname ON table_name;</code>
Create index	<code>create index idindex on table_name(col_name) using btree;</code>
Reset password	<code>UPDATE mysql.user SET Password=PASSWORD('MyNewPass') WH</code>
ERROR 1396 (HY000): Operation CREATE USER...	<code>drop user 'braindenny'@'%' ; flush privileges; CREATE USER..</code>
mysql8 create user with password	<code>CREATE USER 'myuser'@'%' IDENTIFIED BY 'MYPASSWORD';</code>
mysql8 grant privileges to user	<code>GRANT ALL PRIVILEGES ON mydbname.* TO 'myuser'@'%' WITH GRAN</code>

1.5 PSQL/Postgres

Name	Command
Install postgres in Ubuntu	<code>apt-get install postgresql postgresql-client postgresql-contrib</code>
Install postgres in Mac OS	<code>brew install postgres</code>
Check postgres status	<code>service postgresql status</code>
Check version	<code>psql --version</code>
Connect postgresql	<code>psql -U postgres</code>
Create user	<code>CREATE USER tom WITH PASSWORD '';</code>
Grant access	<code>GRANT ALL PRIVILEGES ON DATABASE launchpad_empty to tom;</code>
Postgres configuration	<code>/var/lib/pgsql/data/pg_hba.conf, /etc/postgresql/*/main/postgresql.conf</code>
Promote to super admin	<code>ALTER USER myuser WITH SUPERUSER;</code>
List datbases	<code>\l</code>
List all tables in a database	<code>\d</code>
Change database	<code>\connect launchpad_dev;</code>
Show tables	<code>\ds</code>
Copy databse	<code>createdb -O root -T launchpad_dev launchpad_ustack_cn</code>
Drop database	<code>drop database launchpad_ustack_cn;</code>
Connect db	<code>psql -h myhost -d mydb -U myuser -W</code>
Create user	<code>CREATE USER tom WITH PASSWORD 'myPassword';</code>
Create db	<code>CREATE DATABASE jerry;</code>

1.6 More Resources

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