

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](#)

File me Issues or star this repo.

1.1 SQL Problems

| Name | Problem |
|-------------------------------------|---|
| Use having with group-by | <code>group by class having count(distinct student)...</code> Leetcode: Classes More Than 5 |
| Update records with case clause | <code>set sex = case when sex = 'm' then 'f' else 'm' end</code> Leetcode: Swap Salary |
| Sum with case | <code>sum(case when state = 'approved' then 1 else 0 end)</code> Leetcode: Monthly Transactions |
| Rank score | <code>select @rownr:=@rownr+1 as rank</code> Leetcode: Rank Scores |
| Subquery | <code>where (customer_id, order_date) in (select ...</code> Leetcode: Immediate Food Delivery |
| Sql isnull and if | <code>if(s1.id%2=0, s1.student, if(isnull(s2.student), s1.student, s2.student))</code> |
| Use having with group-by | <code>group by class having count(distinct student)>4</code> Leetcode: Classes More Than 5 |
| round float | <code>(round(accepts/requests, 2)</code> Leetcode: Friend Requests I: Overall Acceptance Rate |
| Select clause add an incremental id | <code>select (@cnt1 := @cnt1 + 1) as id</code> Leetcode: Students Report By Geography |
| 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 |
| If no match show null | Leetcode: Second Highest Salary |
| Get maximum of multiple columns | Leetcode: Triangle Judgement |
| Impressive sql problems | Leetcode: Find Median Given Frequency of Numbers, Leetcode: Consecutive Available Seats |
| Impressive sql problems | Leetcode: Rank Scores, Leetcode: Exchange Seats, Leetcode: Students Report By Geography |
| Leetcode SQL problems | <code>#sql</code> |

1.2 SQL Statement

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

1.3 Mysql Packages

| Name | Command |
|------------------------------|---|
| Install mysql server | <code>apt-get install mysql-server</code> |
| Install mysql client | <code>apt-get install mysql-client libmysqlclient-dev, yum install mysql-devel</code> |
| Install python mysql library | <code>easy_install mysql-python</code> |

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 databases | <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 database | <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

License: Code is licenmysql under MIT License.