

00_generalTips

you can run multiple commands at once just seperate each with a semicolon ctrl+enter -> execute the que

01_sqlIntro

structured query language used to create retrieve update delete data from the database two typ

02_download

for windows: [mysql.com](https://www.mysql.com) -> community downloads -> installer for windows custom -> add most recent n

03_database

database -> think of it as a folder which holds tables tables -> files `CREATE DATABASE myDB;` -> end th

04_tables

consists of rows and columns `CREATE TABLE employees (employee_id INT, first_name VARCHAR`

05_insertRows

INSERT INTO employees VALUES (1, "John", "Doe", 43.99, "2020-01-02"); follow the sequence of empl

06_select

how to select/query all data from the table `SELECT * FROM employees;` to print only certain data only (co

07_updateDelete

to update its simply UPDATE employees SET hourly_pay = 10.25 WHERE employee_id=5; to update mu

08_atuocommit-commit-roolback

AUTOCOMMIT; -> auto saves every transaction by default its set to be ON COMMIT; -> manually save ea

09_currentDate-currentTime

```
CREATE TABLE test(  my_date DATE,  my_time TIME,  my_datetime DATETIME ); INSERT INTO
```

10_unique

CREATE TABLE products(product_id INT, product_name VARCHAR(25) UNIQUE, price DECIMA

11_notNull

a constraint to specify that there should exist a value within that column CREATE TABLE products(prod

12_check

what values can be placed in the column and a method to check input CREATE TABLE employees (en

13_default

if we want the column to have a default value if not specified in input add a constraint when creating a table

14_primaryKeys

can be applied to a column where the value should be unique and NOT NULL one PRIMARY key per table

15_autoIncrement

applied to a column that is set to a key by default the PK is set 1 CREATE TABLE transactions(trans_id

16_foreignKey

a pk from one table found in another table used to link between two tables CREATE TABLE customers(

17_joins

join is a clause used to combine rows from 2 or more tables based on a related column b/w them such as F

18_functions

it is a stored program in which we can pass parameters to return a value `COUNT()`: number of rows `SELECT`

19_and-or-not

logical operators keywords to combine more than one conditions AND: both condition should satisfy selected

20_wildCards

use LIKE operator instead of '=' used to substitute one or more chars in a string % -> any num of random c

21_orderBy

sorts the results of a query in ascending or descending by default -> we dont explicitly need to write to print

22_limit

its a clause used to limit the number of records useful if working with alot of date can be used to display a l

23_union

union combines the results of two or more `SELECT` statements should have the same number of columns

24_selfJoin

join another copy of a table to itself used to compare rows of the same table helps to display a heirarchy of

25_views

virtual table based on the results of an sql statement fields in a view are fields from one or more real tables

26_indexes

used to find values within a specific column more quickly mysql normally searches sequentially through a c

27_subqueries

a query within another query query(subquery) write subquery first and then add it in parenthesis and use it

28_groupBy

aggregate all rows by a specific column often used with aggregate functions eg. `sum()`, `max()`, `min()`, `avg()`,

29_rollUp

extension of group by clause -> add WITH ROLLUP produces another row and shows the grand total(supe

30_onDelete

ON DELETE SET NULL -> when FK is deleted, replace with NULL ON DELETE CASCADE -> when FK is

31_storedProcedure

a prepared SQL code that you can save comes handy if there's a query that you write often reduces network

32_triggers

when an event happens, do something eg. (INSERT, UPDATE, DELETE) check data, handle errors, audit

errorFixes

1175: SET SQL_SAFE_UPDATES = 0;

setting_transactions_once_again

```
drop table transactions; create table transactions( transaction_id int primary key auto_increment, amount
```