



BAsic knowledge

RElational database

About the concepts behind it. Query a Data Base using SQL Language. A gift for the WeDo.

**TYPES OF DATA**

**varchar**

**in**

**double, float, real**

**date**

**binary**

**time**

**SOFTWARE INSTALL**

**DBForge Studio**

**MySql Server**

**SQL Statements**

**SELECT**

* Select the column of the table that you want to search.

**FROM**

* Select the table that you want to search.
* SELECT \* FROM table\_name;

**WHERE**

* Select the conditions to filter specific values. Two different ways to attribute values and a wild card to filter data (filter).

1. =
2. LIKE
3. %

* SELECT \* FROM name\_table WHERE column\_table = value;
* SELECT \* FROM name\_table WHERE column\_table LIKE value;
* SELECT \* FROM name\_table WHERE column\_table LIKE %xxx%;

**ORDER BY**

* It will define the order that the table will present the data.
* SELECT SUM(valor) AS TOTAL, nome AS NAME
* FROM compras
* GROUP BY nome;

**INNER JOIN**

* It will allow the query to search in more than one table, from values that exists in both tables.
* Comparing the PRIMARY/FOREIGN key of the tables that we want to join.
* Inner join only shows what both tables have in common (intersect of both sets)
* SELECT P.pro\_nome, I.itens\_qtd
* FROM mercado\_v2.itens AS I
* INNER JOIN mercado\_v2.produtos AS P
* ON I.itens\_id = P.pro\_id;

**SQL in General (more statements)**

**SHOW**

* It will show all data base/table that exist in this server.

=> SHOW DATABASES;

=> SHOW TABLES;

**USE**

* Allow me to use a specific data base.
* USE NAME\_OF\_DATA\_BASE;

**CREATE**

* It will create a new data base/table in the server.
* Need to specify the parameters.
* CREATE DATABASE name\_database;
* CREATE TABLE name\_table (ex1 INT(11), ex2 VARCHAR(30));

**DESCRIBE**

* It will allow me to show a description of tables in a data base;
* DESCRIBE name\_table;

**INSERT**

* It will populate the data base with values
* Keywords: INSERT, INTO, VALUES.
* INSERT INTO name\_table (column1, column2, columnN) VALUES (‘ex1’, ‘ex2’, 1);

**DROP**

* It will eliminate the database/table.
* DROP TABLE name\_table;
* DROP DATABASE name\_database;

**TRUNCATE**

* It will allow the deletion of data in a table (not the table itself)
* TRUNCATE TABLE name\_table;

**SQL using CMD (command line)**

**In General**

* In folder ‘img’, there are prints from the cmd, where it was used some of the commands above. Without the need of the interface DBForge or MySQL Workbench.

**SQL funtions**

**SUM**

* It will give the total values for a certain ID in a column
* SUM(valor\_add)