

Introduction To Databases - Lecture 1

Introduction To Databases

- Rules : 8:00 PM - 10:00PM [Main Session]
10:00 PM - 11:00PM [Booster Session]

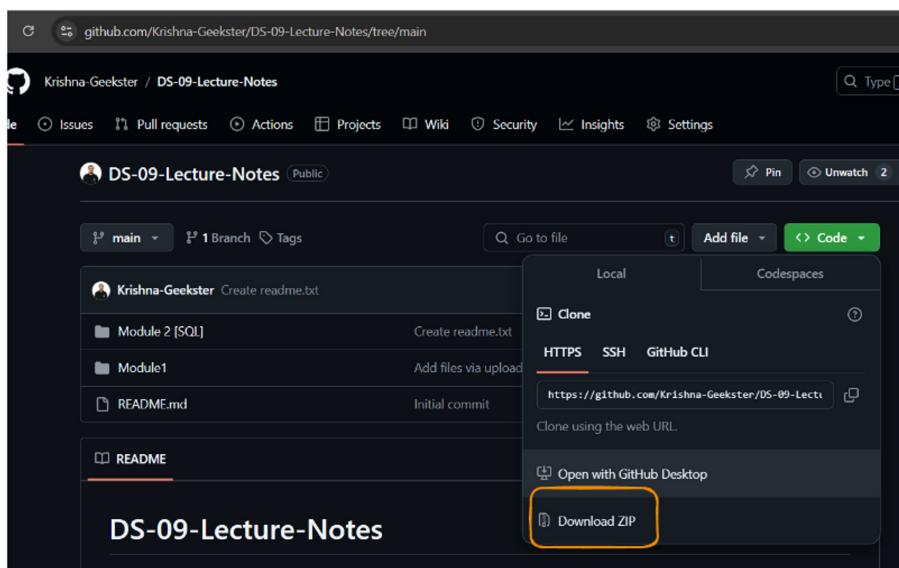
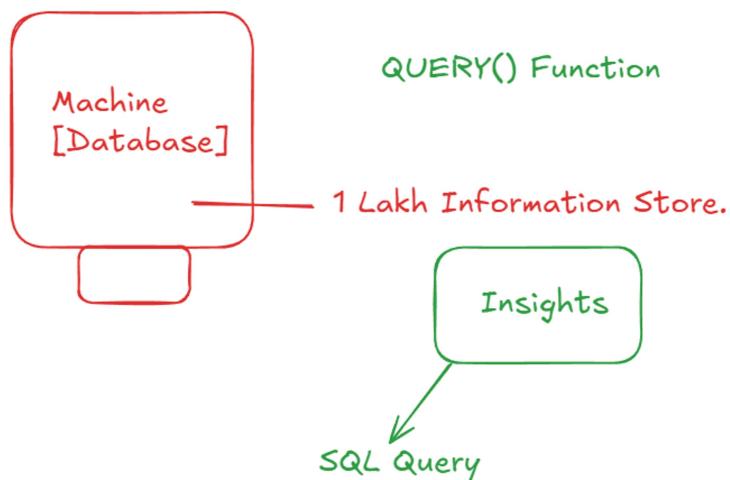
After this
Module - You can
start applying
for Analyst Role

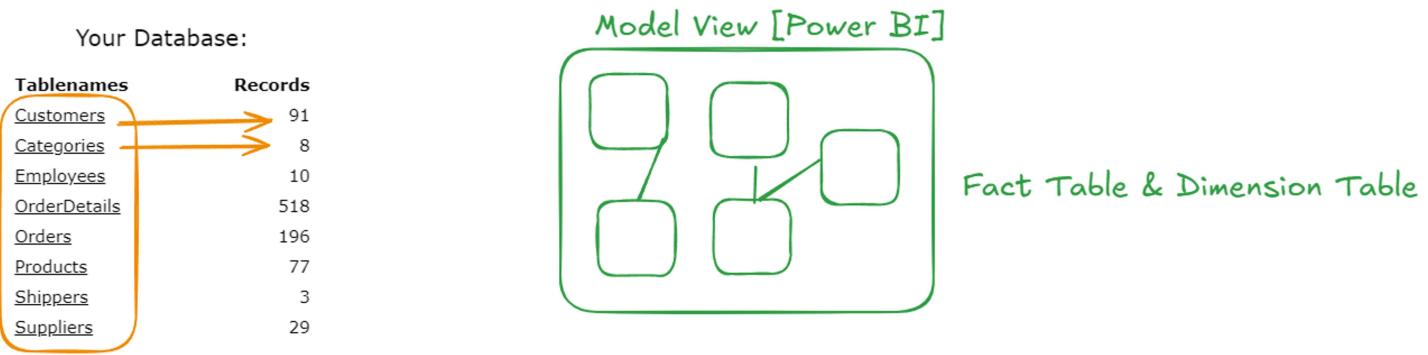
Binary Language - 0 [No] & 1 [Yes]

Repeat - You just need to let me know what I need to repeat
Clear
Done

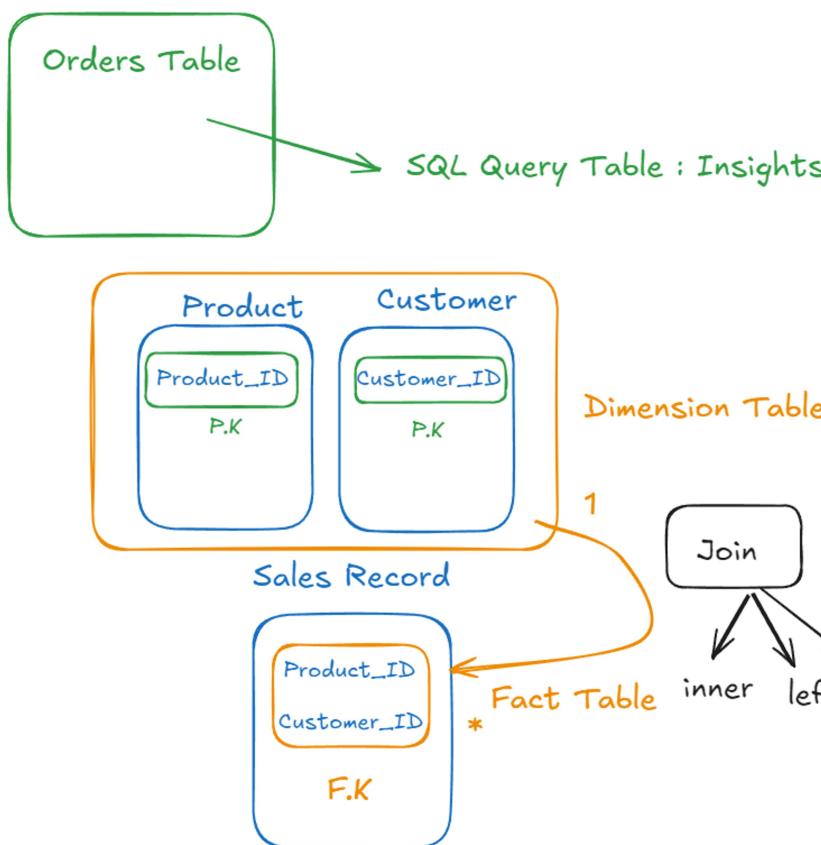
- 5 Minutes of MySQL

- 5 Star * at
Hacker rank.
- SQLbot
- LeetCode





Database : That stores information of different table.
That table contains info in structure format using rows & columns



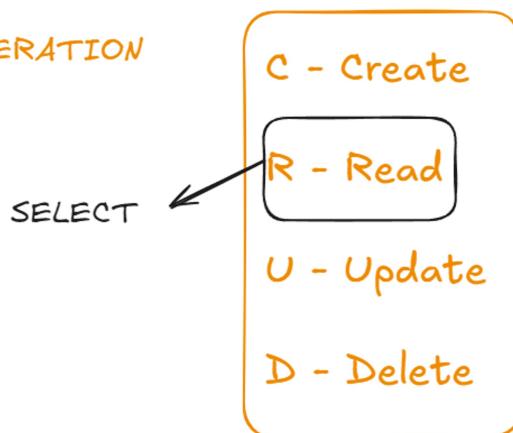
Star Schema Vs Snowflake Schema

Database [Storing Multiple tables]

MYSQL [Syntax]

`SELECT * FROM Customers;` you are fetching the info from Customer Table
- Reading out all the columns present on Customer Table/
selecting all the columns
Read the value

CRUD OPERATION



Instagram

Creating a post.
Reading out other post/Status.
Update your status/updating profile..
Delete the post/profile

column Filter

`SELECT ProductName , Unit , Price FROM Products;`

You are just changing the view.

Number of Records: 77

ProductName	Unit	Price
Chais	10 boxes x 20 bags	18
Chang	24 - 12 oz bottles	19
Aniseed Syrup	12 - 550 ml bottles	10
Chef Anton's Cajun Seasoning	48 - 6 oz jars	22
Chef Anton's Gumbo Mix	36 boxes	21.35
Grandma's Boysenberry Spread	12 - 8 oz jars	25
Uncle Bob's Organic Dried Pears	12 - 1 lb pkgs.	30

```
SELECT * FROM Products;
```

Number of Records: 77

ProductID	ProductName	SupplierID	CategoryID	Unit	Price
1	Chais	1	1	10 boxes x 20 bags	18
2	Chang	1	1	24 - 12 oz bottles	19
3	Aniseed Syrup	1	2	12 - 550 ml bottles	10

SELECT * FROM Customers WHERE Country = "Germany"; row filter

column filter

Number of Records: 11

CustomerID	CustomerName	ContactName	Address	City	PostalCode	Country
1	Alfreds Futterkiste	Maria Anders	Obere Str. 57	Berlin	12209	Germany
6	Blauer See Delikatessen	Hanna Moos	Forsterstr. 57	Mannheim	68306	Germany
17	Drachenblut Delikatessend	Sven Ottlieb	Walserweg 21	Aachen	52066	Germany
25	Frankenversand	Peter Franken	Berliner Platz 43	München	80805	Germany
39	Königlich Essen	Philip Cramer	Maubelstr. 90	Brandenburg	14776	Germany
44	Lehmanns Marktstand	Renate Messner	Magazinweg 7	Frankfurt a.M.	60528	Germany
52	Morgenstern Gesundkost	Alexander Feuer	Heerstr. 22	Leipzig	04179	Germany
56	Ottilies Käseladen	Henriette Pfalzheim	Mehrheimerstr. 369	Köln	50739	Germany

20 Hours Learning Rule

() > */ > +-

SELECT CustomerName , City , PostalCode , Country FROM Customers WHERE Country = "Germany";

column Filter

row filter

Edit the SQL Statement, and click "Run SQL" to see the result.

Run SQL »

Result:

Number of Records: 11

CustomerName	City	PostalCode	Country
Alfreds Futterkiste	Berlin	12209	Germany
Blauer See Delikatessen	Mannheim	68306	Germany

Before Table Name we apply filter on "Col" and after table Name we apply filter on "Row" using Where Clause.

* [All columns] [Less Efficient] < Calling Limited Columns [More Efficient]

6 Columns - *

3 columns - specify their name

Number of Records: 77

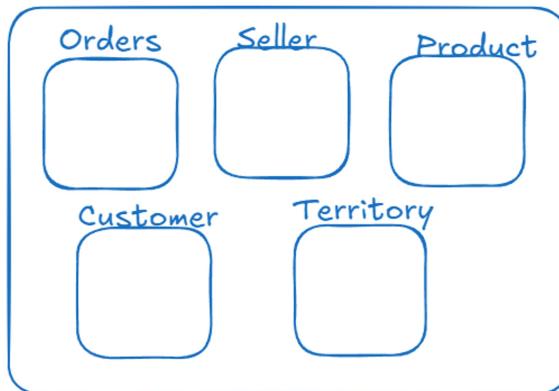
ProductID	ProductName	SupplierID	CategoryID	Unit	Price
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3	Aniseed Syrup	1	2	12 - 550 ml bottles	10
4	Chef Anton's Cajun Seasoning	2	2	48 - 6 oz jars	22
5	Chef Anton's Gumbo Mix	2	2	36 boxes	21.35
6	Grandma's Boysenberry Spread	3	2	12 - 8 oz jars	25
7	Uncle Bob's Organic Dried Pears	3	7	12 - 1 lb pkgs.	30

Reading using "Select" Keyword - It is not changing your original data.
It is just creating a new table as rough table just for having a filter apply.

Query Function

-- Group By , Order By , Limit , Where , "as" for renaming

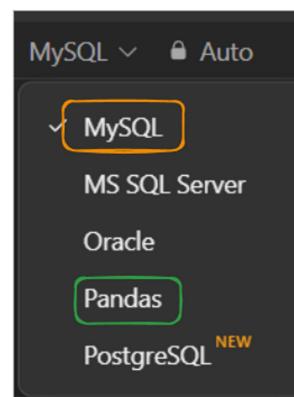
Amazon Database



Database is a container which stores multiple table having raw data in it.

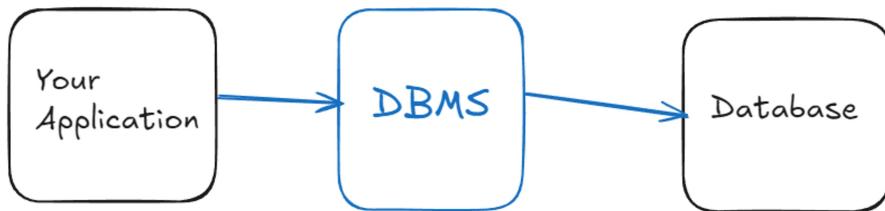
MySQL Vs SQL [Structured Query Language]

- MySQL [Code]
- Oracle [Code]
- SQLite [Code]
- PostgreSQL [Code]
- SQL Server

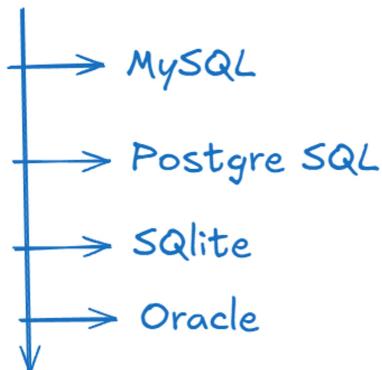


- Knowing one things thoroughly is important.
It helps you to switch other at any point of time.

SQL [Structure Query Language] - MySQL Workbench



Database Management System



SQL Vs MySQL

Computer
Machine [0/1]

programming Language

compiler / Interpreter

SQL is a language , we use to talk to our database.

- Find out all the user who are 18 or older [English]

MySQL
Syntax

Select * From User where age >= 18;

";" use of semicolon to terminate the query.

Aditika Singh to Everyone 21:34

SQL is a language and MySQL is the platform/DBMS that works with SQL to work with data

```
CREATE TABLE <tableName>(  
    product_id int not null p.k auto_increment,  
    name varchar(100) ,  
    age int,  
    address varchar(100),  
    gender char(1)  
);
```

CASE SENSITIVE VS CASE INSENSITIVE

