

# SQL BASICS

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# IMPORT DATABASE

```
mysql -u username -p database_name < file.sql
```

- Access monitor: `mysql -u [username] -p;` (will prompt for password)
- Show all databases: `show databases;`
- Access database: `mysql -u [username] -p [database]` (will prompt for password)
- Create new database: `create database [database];`
- Select database: `use [database];`
- Determine what database is in use: `select database();`

## Make inquiries

The majority of database management systems these days use a common query language known as SQL (Structured Query Language)

To put it simply, SQL (Structured Query Language) is the language of databases and almost all companies use databases to store their data.

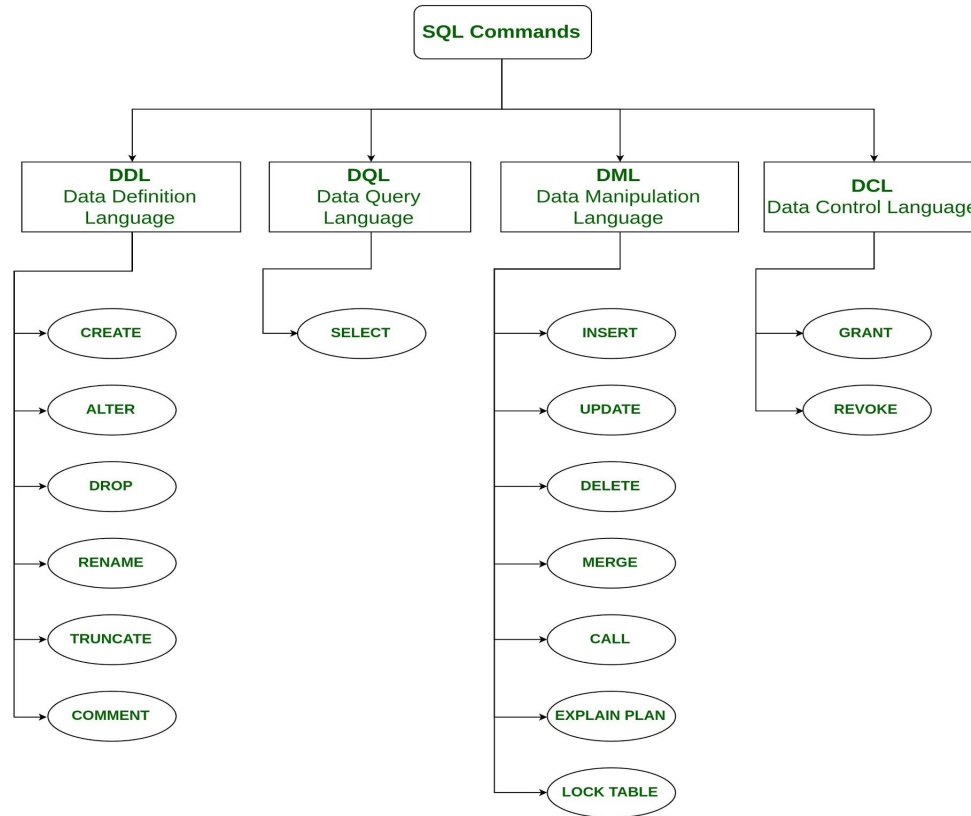
In relational database management systems, a *query* is any command used to retrieve data from a table.

In Structured Query Language (SQL), queries are almost always made using the **SELECT** statement.

## Types of queries

- DDL(Data Definition Language).
- DML(Data Manipulation Language).
- DQL(Data Query Language).
- DCL(Data Control Language).

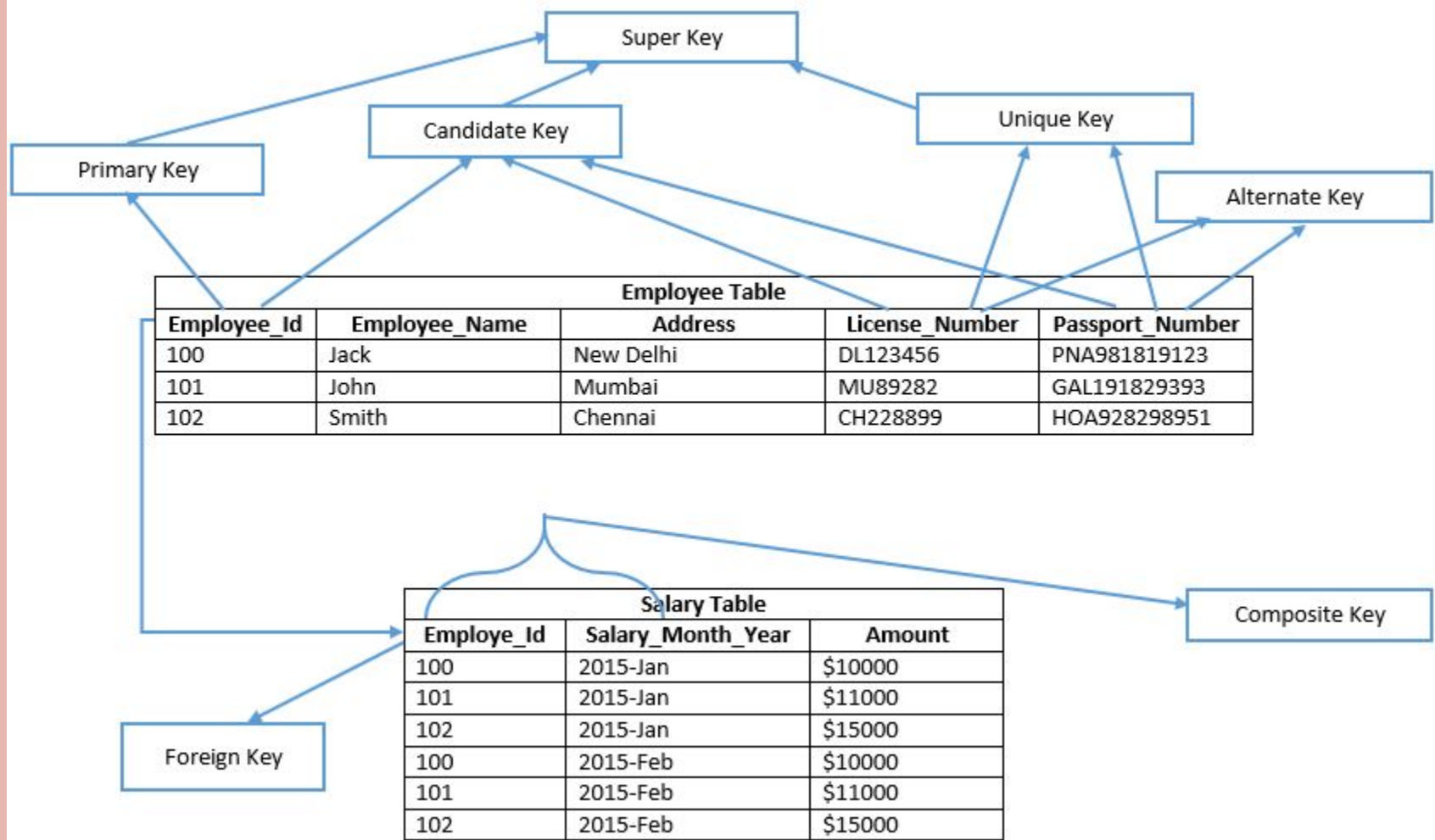
## Types of SQL Commands



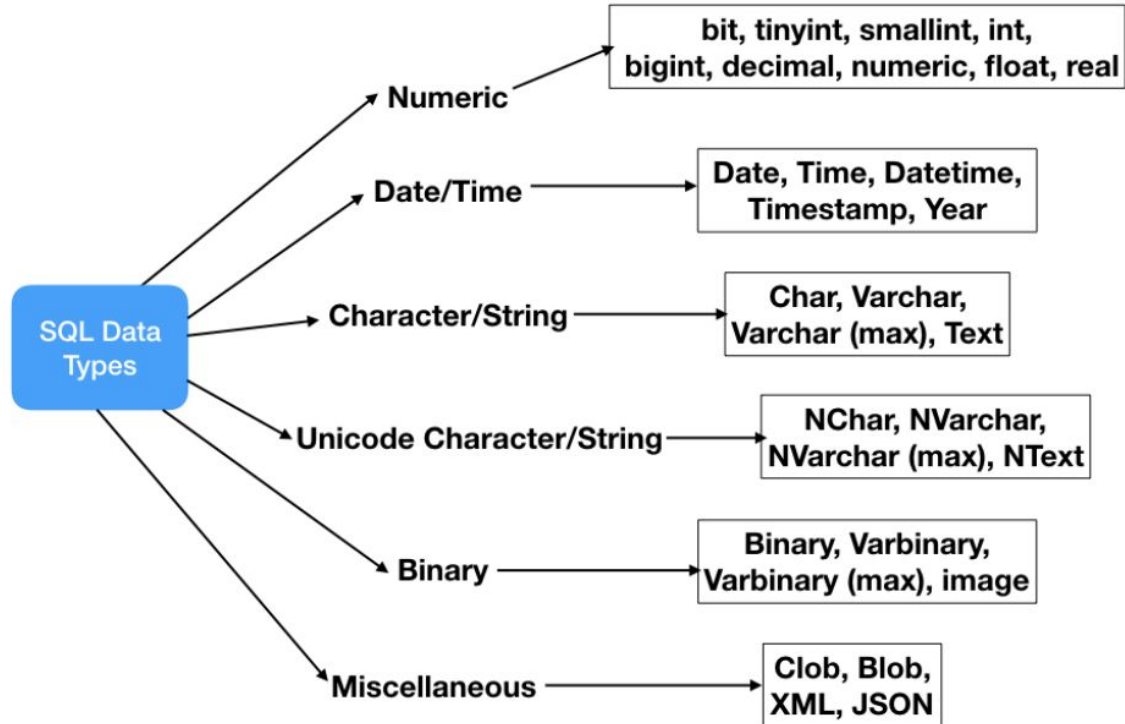
# Types of Keys

There are different types of keys we can use in SQL SERVER which are as follows:-

- Super Key
- Candidate Key
- Primary Key
- Alternate key
- Composite/Compound Key
- Unique Key
- Foreign Key



# Types of data





# Collation

Collation refers to a set of rules that determine how data is sorted and compared. Character data is sorted using rules that define the correct character sequence, with options for specifying case-sensitivity, accent marks, kana character types and character width. IT is also used during character search in columns

Databases with different collation:

- create database BIN collate Latin1\_General\_BIN ;
- create database CI\_AI\_KS collate Latin1\_General\_CI\_AI\_KS;
- create database CS\_AS\_KS\_WS collate Latin1\_General\_CS\_AS\_KS\_WS

## Utf8\_general\_ci & utf8\_spanish\_ci

These two collations are both for the UTF-8 character encoding. The differences are in how text is sorted and compared.

- The charset for both is: UTF-8
- The collate is different: for the first is general collate and for the second is spanish

The bytes for the letters remain the same except for example, if the text contains letters like ñ or double L ll, using different collates you will notice that the text is ordered differently when you make one ORDER BY.