

The background image is a photograph of a modern office interior, specifically a conference room. It features a long, dark wooden conference table surrounded by several black office chairs. The room has large floor-to-ceiling windows that offer a view of a city skyline. The entire image is overlaid with a semi-transparent orange filter. The text 'SQL Theory' is centered in the middle of the image in a white, sans-serif font.

# SQL Theory

The background image shows a modern office interior with a long, dark conference table and several black office chairs. The room has large windows on the right side, offering a view of a cityscape. The ceiling is a grid of white tiles with recessed lighting. The overall color scheme is blue and white, with a blue overlay on the image.

# Data Definition Language (DDL)

# Data Definition Language

- SQL's syntax

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comprises several types of statements that allow you to perform various commands and operations

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- Data Definition Language (DDL)

- a syntax
- a set of statements that allow the user to define or modify data structures and objects, such as tables

# Data Definition Language

## ● SQL's syntax

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- a syntax
- a set of statements that allow the user to define or modify data structures and objects, such as tables

## ● the CREATE statement



# Data Definition Language

## ● SQL's syntax

comprises several types of statements that allow you to perform various commands and operations

## ● Data Definition Language (DDL)

- a syntax
- a set of statements that allow the user to define or modify data structures and objects, such as tables

## ● the CREATE statement

used for creating entire databases and database objects as tables



# Data Definition Language

- the CREATE statement

used for creating entire databases and database objects as tables



SQL

```
CREATE object_type object_name;
```

# Data Definition Language

- the CREATE statement

used for creating entire databases and database objects as tables



```
CREATE object_type object_name;
```

SQL

```
CREATE TABLE object_name (column_name data_type);
```

# Data Definition Language



SQL

```
CREATE TABLE object_name (column_name data_type);
```

# Data Definition Language



SQL

```
CREATE TABLE object_name (column_name data_type);
```

```
CREATE TABLE sales (purchase_number INT);
```

# Data Definition Language



SQL

```
CREATE TABLE object_name (column_name data_type);
```

```
CREATE TABLE sales (purchase_number INT);
```

sales

purchase_number

# Data Definition Language



SQL

```
CREATE TABLE sales (purchase_number INT);
```

sales

purchase_number

- the table name can coincide with the name assigned to the database

# Data Definition Language

- the ALTER statement



# Data Definition Language

- the ALTER statement  
used when altering existing objects

# Data Definition Language

- the ALTER statement  
used when altering existing objects
- - ADD
  - REMOVE
  - RENAME

# Data Definition Language

sales

purchase_number

# Data Definition Language



SQL

```
ALTER TABLE sales
```

```
ADD COLUMN date_of_purchase DATE;
```

sales

purchase_number

# Data Definition Language



SQL

```
ALTER TABLE sales
```

```
ADD COLUMN date_of_purchase DATE;
```

sales

purchase_number	date_of_purchase

# Data Definition Language

- the DROP statement

# Data Definition Language

- the DROP statement  
used for deleting a database object



# Data Definition Language



SQL

```
DROP object_type object_name;
```

customers

customer_id	first_name

# Data Definition Language

used for deleting a database object



SQL

```
DROP object_type object_name;
```

```
DROP TABLE customers;
```

customers

customer_id	first_name

# Data Definition Language

used for deleting a database object



SQL

```
DROP object_type object_name;
```

```
DROP TABLE customers;
```

customers

customer_id	first_name

# Data Definition Language

- the RENAME statement

# Data Definition Language

- the RENAME statement  
allows you to rename an object

# Data Definition Language



SQL

```
RENAME object_type object_name TO new_object_name;
```

customers

customer_id	first_name

# Data Definition Language

used for deleting a database object



SQL

```
RENAME object_type object_name TO new_object_name;
```

```
RENAME TABLE customers TO customer_data;
```

customers

customer_id	first_name



# Data Definition Language

used for deleting a database object



SQL

```
RENAME object_type object_name TO new_object_name;
```

```
RENAME TABLE customers TO customer_data;
```

customer_id	first_name

# Data Definition Language

used for deleting a database object



SQL

```
RENAME object_type object_name TO new_object_name;
```

```
RENAME TABLE customers TO customer_data;
```

customer\_data

customer_id	first_name

# Data Definition Language

- the TRUNCATE statement

# Data Definition Language

- the TRUNCATE statement

instead of deleting an entire table through DROP, we can also remove its data and continue to have the table as an object in the database

# Data Definition Language



SQL

```
TRUNCATE object_type object_name;
```

customers

customer_id	first_name
_____	_____
_____	_____
_____	_____
_____	_____

# Data Definition Language

used for deleting a database object



SQL

```
TRUNCATE object_type object_name;
```

```
TRUNCATE TABLE customers;
```

customers

customer_id	first_name
_____	_____
_____	_____
_____	_____
_____	_____

# Data Definition Language

used for deleting a database object



SQL

```
TRUNCATE object_type object_name;
```

```
TRUNCATE TABLE customers;
```

customers

customer_id	first_name
_____	_____
_____	_____
_____	_____
_____	_____



# Data Definition Language

- Data Definition Language (DDL)

# Data Definition Language

## Data Definition Language (DDL)

- CREATE
- ALTER
- DROP
- RENAME
- TRUNCATE

Next:

Next:

Keywords

Next:

Keywords

Data Manipulation Language