Introduction

At the end of this Chapter, the learner will be able to use the **DML (Data Manipulation Language)** to :

* Insert Data into table
* Update Data
* Delete data from table
* Insert into clause
* **Implicit Insert:** Insert in all table columns
* INSERT INTO table\_name VALUES
* (
* value\_column1,
* value\_column2,
* ...,
* value\_columnn
* );
* The number of column values must be equal to the number of table columns and of the same types

# Insert into clause

**Explicit Insert:** Insert in a specified list of columns

INSERT INTO table\_name

(

column1,

column2,

column3

)

VALUES

(

value\_column1,

value\_column2,

value\_column3

);

Insert into Clause

* The values to be added must verify the defined constraints on the columns table.
* Any record which does not verify the constraints will be rejected.
* The columns created with NOT NULL constraint must have values.
* We can use the following syntax to insert data from table.

INSERT INTO table\_name (column1,column2)

SELECT column1, column2 from table\_name1;

**Which of the following instructions is correct to insert the following values in these tables Customers (CustCode, custName, custAdress, custTel) Orders (OrderCode, OrderDate, #CustCode) (( https://i.imgur.com/E2SfXdO.png ))**

https://i.imgur.com/3eyFDbO.png

# Update clause

Syntax:

UPDATE table\_name SET column\_name=new\_value

[WHERE (conditions)];

It is not possible to update several tables in the same query.  
The new values must satisfy the columns constraints  
When there is no conditions in the query, then all the table rows will be updated with the same value.

**Which of the following is correct to update the address of the customer CO1 to ‘Sousse’ and the date of the Order 101 to ‘22/10/2019’ Customers (CustCode, custName, custAdress, custTel) Orders (OrderCode, OrderDate, #CustCode) ((( https://i.imgur.com/NDIDw22.png )))**

https://i.imgur.com/7ENlLFe.png

# Delete clause

**Syntax:**

DELETE FROM table\_name [WHERE (conditions)];

When there is no conditions in the query, then all the table records will be removed, which will be equivalent to run this command:

TRUNCATE FROM table\_name;

**Which of the following is correct to remove the client ‘C01’ from the customers table Customers (CustCode, custName, custAdress, custTel) https://i.imgur.com/OI31IUP.png**

https://i.imgur.com/oK2FuW9.png

Recap

The Data Manipulation Language provides queries to add data into tables, update data and delete data rows.  
There main three queries are :

* Insert,
* Update,
* Delete