



SQL AND DATABASES

CHEATSHEET FOR LESSON 5

1- GENERAL PIPELINE OF CREATING A NEW TABLE IN AN SQLITE DATABASE FROM A PYTHON PROGRAM

- First, create a Connection object using the connect() function of the sqlite3 module.
- Second, create a Cursor object by calling the cursor() method of the Connection object.
- Third, pass the CREATE TABLE statement to the execute() method of the Cursor object and execute this method.

2- GENERAL PIPELINE TO QUERY DATA IN AN SQLITE DATABASE FROM PYTHON

- First, establish a connection to the SQLite database by creating a Connection object.
- Next, create a Cursor object using the cursor method of the Connection object.
- Then, execute a SELECT statement.
- After that, call the fetchall() method of the cursor object to fetch the data.
- Finally, loop the cursor and process each row individually

3- SYNTAX OF A TYPICAL SQL QUERY

```
SELECT expression1 AS alias1, expression2 AS alias2, ... expression_n AS alias3,  
       aggregate_function (aggregate_expression) AS aliasAgg  
FROM tables AS aliastable  
[WHERE conditions]  
GROUP BY expression1, expression2, ... expression_n  
HAVING condition;
```

4 - JOINS

There are 4 types of joins : Inner join , full outer join, Left join , Right join .
Joins results are temporary created tables that are not saved in the databas