SQL ORDER BY CLAUSE

ORDER BY clause

The ORDER BY clause orders or sorts the result of a query according to the values in one or more specific columns.

More than one columns can be ordered one within another. It depends on the user that, whether to order them in ascending or descending order.

The default order is ascending.

The SQL ORDER BY clause is used with the SQL SELECT statement.

Note: SQL ORDER BY clause always come at the end of a SELECT statement.

Syntax:

SELECT <column_list> FROM < table name >.
WHERE <condition>
ORDER BY <columns> [ASC | DESC];

Parameters:

Name	Description
table_name	Name of the table.
column_list	Name of the columns of the table.
columns	Name of the columns which will participate in ordering.*/

Structure of AGENT table

Field	Type	Null	Key	Default	Extra
AGENT_CODE	varchar(6)	NO	PRI		
AGENT_NAME	varchar(40)	YES		NULL	
WORKING_AREA	varchar(35)	YES		NULL	
COMMISSION	decimal(10,2)	YES		NULL	
PHONE_NO	varchar(15)	YES		NULL	
COUNTRY	varchar(25)	YES		NULL	

```
CREATE TABLE IF NOT EXISTS agents(
  AGENT_CODE varchar(6) NOT NULL DEFAULT '',
  AGENT_NAME varchar(40) DEFAULT NULL,
  WORKING_AREA varchar(35) DEFAULT NULL,
  COMMISSION decimal(10,2) DEFAULT NULL,
  PHONE_NO varchar(15) DEFAULT NULL,
  COUNTRY varchar(25) DEFAULT NULL,
  PRIMARY KEY (AGENT_CODE)
);
desc agents;
```

Populating the Data into the table

AGENT_CODE	AGENT_NAME	WORKING_AREA	COMMISSION	PHONE_NO	COUNTRY
A001	Subbarao	Bangalore	0.14	077-12346674	
A002	Mukesh	Mumbai	0.11	029-12358964	
A003	Alex	London	0.13	075-12458969	
A004	Ivan	Torento	0.15	008-22544166	
A005	Anderson	Brisban	0.13	045-21447739	
A006	McDen	London	0.15	078-22255588	
A007	Ramasundar	Bangalore	0.15	077-25814763	
A008	Alisha	New York	0.12	044-25874365	
A009	jasmin	Hampshair	0.11	008-22536178	
A010	Santakumar	Chennai	0.14	007-22388644	
A011	Ravi Kumar	Bangalore	0.15	077-45625874	
A012	Lucida	San Jose	0.12	044-52981425	

INSERT INTO agents (AGENT_CODE,
AGENT_NAME,WORKING_AREA,COMMISSION,PHONE_NO,COUNTRY) VALUES
('A007','Ramasundar','Bangalore','0.15','077-25814763','\r');
Similarly enter all other records.
select * from agents;

SQL ORDER BY clause - Sorting on column names

Find the agent name, working area and commision.'agent_code' should come in ascending order.
SELECT agent_code,agent_name,working_area,commission
FROM agents ORDER BY agent_code;

Usage of the ORDER BY clause with the DESC argument
Find 'agent_name', 'agent_name','working_area' and 'commission' from the 'agents' table. 'agent_code' should come in descending order,

SELECT agent_code,agent_name,working_area,commission
FROM agents ORDER BY agent_code DESC;

Ordering by more than one columns
You can use the ORDER BY clause to sort the result of a query according to the values in more than one columns.
Find 'agent_name', 'agent_name','working_area' and 'commission' from the 'agents' table with following conditions -
1. 'working_area' should come in ascending order first,
2. within the same 'working_area', 'agent_code' should come in ascending order,

SELECT agent_code,agent_name,working_area,commission

FROM agents ORDER BY working_area,agent_code;

<u>Order by in more columns</u>
Ordering by more than one columns in ascending or descending order
You can use the ORDER BY clause to sort the result of a query on multiple columns
in various order (ascending or descending).

Here is an example:
**Find 'agent_name', 'agent_name','working_area' and 'commission' from the 'agents' table
with following conditions -**
1. 'working_area' comes in ascending order first,
2. 'commission' comes in descending order,

SELECT agent_code,agent_name,working_area,commission
FROM agents ORDER BY working_area ASC, commission DESC;