

SQL - SORTING RESULTS

The SQL **ORDER BY** clause is used to sort the data in ascending or descending order, based on one or more columns. Some database sorts query results in ascending order by default.

Syntax:

The basic syntax of ORDER BY clause which would be used to sort result in ascending or descending order is as follows:

```
SELECT column-list
FROM table_name
[WHERE condition]
[ORDER BY column1, column2, .. columnN] [ASC | DESC];
```

You can use more than one column in the ORDER BY clause. Make sure whatever column you are using to sort, that column should be in column-list.

Example:

Consider CUSTOMERS table is having following records:

ID	NAME	AGE	ADDRESS	SALARY
1	Ramesh	32	Ahmedabad	2000.00
2	Khilan	25	Delhi	1500.00
3	kaushik	23	Kota	2000.00
4	Chaitali	25	Mumbai	6500.00
5	Hardik	27	Bhopal	8500.00
6	Komal	22	MP	4500.00
7	Muffy	24	Indore	10000.00

Following is an example which would sort the result in ascending order by NAME and SALARY:

```
SQL> SELECT * FROM CUSTOMERS
      ORDER BY NAME, SALARY;
```

This would produce following result:

ID	NAME	AGE	ADDRESS	SALARY
4	Chaitali	25	Mumbai	6500.00
5	Hardik	27	Bhopal	8500.00
3	kaushik	23	Kota	2000.00
2	Khilan	25	Delhi	1500.00
6	Komal	22	MP	4500.00
7	Muffy	24	Indore	10000.00
1	Ramesh	32	Ahmedabad	2000.00

Following is an example which would sort the result in descending order by NAME:

```
SQL> SELECT * FROM CUSTOMERS
      ORDER BY NAME DESC;
```

This would produce following result:

ID	NAME	AGE	ADDRESS	SALARY
1	Ramesh	32	Ahmedabad	2000.00
7	Muffy	24	Indore	10000.00
6	Komal	22	MP	4500.00
2	Khilan	25	Delhi	1500.00
3	kaushik	23	Kota	2000.00
5	Hardik	27	Bhopal	8500.00
4	Chaitali	25	Mumbai	6500.00

To fetch the rows with own preferred order, the SELECT query would as follows:

```
SQL> SELECT * FROM CUSTOMERS
      ORDER BY (CASE ADDRESS
      WHEN 'DELHI' THEN 1
      WHEN 'BHOPAL' THEN 2
      WHEN 'KOTA' THEN 3
      WHEN 'AHMADABAD' THEN 4
      WHEN 'MP' THEN 5
      ELSE 100 END) ASC, ADDRESS DESC;
```

This would produce following result:

ID	NAME	AGE	ADDRESS	SALARY
2	Khilan	25	Delhi	1500.00
5	Hardik	27	Bhopal	8500.00
3	kaushik	23	Kota	2000.00
6	Komal	22	MP	4500.00
4	Chaitali	25	Mumbai	6500.00
7	Muffy	24	Indore	10000.00
1	Ramesh	32	Ahmedabad	2000.00

This will sort customers by ADDRESS in your own Order of preference first and in a natural order for the remaining addresses. Also remaining Addresses will be sorted in the reverse alpha order.