

University of Central Florida

CGS 2545

Database Concepts

DEPARTMENT OF ELECTRICAL ENGINEERING & COMPUTER SCIENCE
COMPUTER SCIENCE DIVISION

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 databases sort the query results in an ascending order by default
 - can use more than one column in the ORDER BY clause
 - make sure that whatever column you are using to sort, that column should be in the column-list

SORTING Results

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

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

SORTING Results

- Example
 - Consider the CUSTOMERS table having the 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

SORTING Results

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

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

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

SORTING Results

- Example
 - The following code block has an example, which would sort the result in a descending order by NAME

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

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

SORTING Results

- Example
 - To fetch the rows with their own preferred order, the SELECT query used would be 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;
```

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

SORTING Results

- Example
 - This will sort the customers by ADDRESS in your **ownOrder** of preference first and in a natural order for the remaining addresses.
 - Also, the remaining Addresses will be sorted in the reverse alphabetical order