

# **University of Central Florida**

## **CGS 2545**

### **Database Concepts**

DEPARTMENT OF ELECTRICAL ENGINEERING & COMPUTER SCIENCE  
**COMPUTER SCIENCE DIVISION**

# Group By

- The SQL **GROUP BY** clause
  - is used in collaboration with the SELECT statement to arrange identical data into groups.
  - follows the WHERE clause in a SELECT statement
  - precedes the ORDER BY clause

# Group By

- Syntax
  - The basic syntax of a GROUP BY clause is shown in the following code block.
  - The GROUP BY clause must follow the conditions in the WHERE clause and must precede the ORDER BY clause if one is used.

```
SELECT column1, column2  
FROM table_name  
WHERE [ conditions ]  
GROUP BY column1, column2  
ORDER BY column1, column2
```

# Group By

- Example
  - Consider the CUSTOMERS table is 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

# Group By

- Example
  - If you want to know the total amount of the salary on each customer, then the GROUP BY query would be as follows

```
SQL> SELECT NAME, SUM(SALARY) FROM CUSTOMERS  
GROUP BY NAME;
```

+-----+-----+	
NAME	SUM(SALARY)
+-----+-----+	
Chaitali	6500.00
Hardik	8500.00
kaushik	2000.00
Khilan	1500.00
Komal	4500.00
Muffy	10000.00
Ramesh	2000.00
+-----+-----+	

# Group By

- Example
  - look at a table where the CUSTOMERS table has the following records with duplicate names

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

# Group By

- Example
  - Now again, if you want to know the total amount of salary on each customer, then the GROUP BY query would be as follows

```
SQL> SELECT NAME, SUM(SALARY) FROM CUSTOMERS  
GROUP BY NAME;
```

```
+-----+-----+  
| NAME      | SUM(SALARY) |  
+-----+-----+  
| Hardik    |      8500.00 |  
| kaushik   |      8500.00 |  
| Komal     |      4500.00 |  
| Muffy     |     10000.00 |  
| Ramesh    |      3500.00 |  
+-----+-----+
```