DBMS(DAY 2)

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POINTS TO DISCUSS

- Distinct statement
- Where Clause
- Order By Keyword
- And, Or, Not Operator
- In, Not in Operator
- Between Operator
- SQL Aliases
- Extract function
- Dual

DISTINCT STATEMENT

- The SELECT DISTINCT statement is used to return only distinct (different) values.

- Inside a table, a column often contains many duplicate values; and sometimes you only want to list the different (distinct) values.

SELECT DISTINCT Syntax

SELECT DISTINCT *column1, column2, ...*
    FROM *table_name*;

SQL WHERE CLAUSE

- The WHERE clause is used to filter records.

- The WHERE clause is used to extract only those records that fulfill a specified condition.

WHERE Syntax

- SELECT *column1, column2, ...*
  FROM *table_name*
  WHERE *condition*;

- **Note: The WHERE clause is not only used in SELECT statement, it is also used in UPDATE, DELETE statement, etc.!**

SQL ORDER BY KEYWORD

- The ORDER BY keyword is used to sort the result-set in ascending or descending order.

- The ORDER BY keyword sorts the records in ascending order by default. To sort the records in descending order, use the DESC keyword.

ORDER BY Syntax

- SELECT *column1, column2, ...*
FROM *table_name*
ORDER BY *column1, column2, ...* ASC|DESC;

THE SQL AND, OR AND NOT OPERATORS

The AND and OR operators are used to filter records based on more than one condition:

- The AND operator displays a record if all the conditions separated by AND are TRUE.

- The OR operator displays a record if any of the conditions separated by OR is TRUE.

- The NOT operator displays a record if the condition(s) is NOT TRUE.

AND Syntax

- SELECT *column1, column2, ...*
  FROM *table_name*
  WHERE *condition1* AND *condition2* AND *condition3 ...;*

OR Syntax

- SELECT *column1, column2, ...*
  FROM *table_name*
  WHERE *condition1* OR *condition2* OR *condition3 ...*;

NOT Syntax

- SELECT *column1, column2, ...*
  FROM *table_name*
  WHERE NOT *condition*;

SQL IN OPERATOR

- The IN operator allows you to specify multiple values in a WHERE clause.

- The IN operator is a shorthand for multiple OR conditions.

IN Syntax

- SELECT *column_name(s)*
  FROM *table_name*
  WHERE *column_name* IN (*value1, value2, ...*);

OR

- SELECT *column_name(s)*
  FROM *table_name*
  WHERE *column_name* IN (*SELECT STATEMENT*);

BETWEEN OPERATOR

- The BETWEEN operator selects values within a given range. The values can be numbers, text, or dates.

- The BETWEEN operator is inclusive: begin and end values are included.

BETWEEN Syntax

- SELECT *column_name(s)*
  FROM *table_name*
  WHERE *column_name* BETWEEN *value1* AND *value2;*

SQL ALIASES

- SQL aliases are used to give a table, or a column in a table, a temporary name.

- Aliases are often used to make column names more readable.

- An alias only exists for the duration of the query.

Alias Column Syntax

- SELECT *column_name* AS *alias_name*
  FROM *table_name;*

Alias Table Syntax

- SELECT *column_name(s)*
  FROM *table_name* AS *alias_name;*

EXTRACT() FUNCTION

The EXTRACT() function extracts a part from a given date

Syntax

- EXTRACT(*part* FROM *date);*

DUAL

DUAL is a table automatically created by Oracle Database along with the data dictionary. **DUAL** is in the schema of the user SYS but is accessible by the name **DUAL** to all users. It has one column, DUMMY , defined to be VARCHAR2(1) , and contains one row with a value X .

THANK YOU