

Practical 2

Objective:- To Manipulate the Operations on the table.

DML (Data Manipulation Language) Data manipulation is

- The retrieval of information stored in the database.
- The insertion of new information into the database.
- The deletion of information from the database.
- The modification of information stored by the appropriate data model. There are basically two types.
 - (i) **Procedural DML**:- require a user to specify what data are needed and how to get those data.
 - (ii) **Non Procedural DML** : require a user to specify what data are needed without specifying how to get those data.

Updating the content of a table:

In creation situation we may wish to change a value in table without changing all values in the tuple . For this purpose the update statement can be used.

Update table name

Set columnname = expression, columnname =expression.....

Where columnname = expression;

Deletion Operation:-

A delete query is expressed in much the same way as Query. We can delete whole tuple (rows) we can delete values on only particulars attributes.

Deletion of all rows

Syntax:

Delete from tablename :

Deletion of specified number of rows

Syntax:

Delete from table name

Where search condition ;

Computation in expression lists used to select data

+	Addition	-	Subtraction
*	multiplication	**	exponentiation
/	Division	()	Enclosed operation

Renaming columns used with Expression Lists: - The default output column names can be renamed by the user if required

Syntax:

Select column name	result_columnname,
Columnname	result_columnname,
From table name;	

Logical Operators:

The logical operators that can be used in SQL sentences are

AND	all of must be included
OR	any of may be included
NOT	none of could be included

Range Searching: Between operation is used for range searching.

Pattern Searching:

The most commonly used operation on string is pattern matching using the operation 'like' we describe patterns by using two special characters.

- Percent (%) ; the % character matches any substring we consider the following examples.
- 'Perry %' matches any string beginning with perry
- '% idge %' matches any string containing ' idge as substring.
- ' - - - ' matches any string exactly three characters.
- ' - - - %' matches any string of at least of three characters.

Oracle functions:

Functions are used to manipulate data items and return result. function follow the format of function _name (argument1, argument2 ..) .An arrangement is user defined variable or constant. The structure of function is such that it accepts zero or more arguments.

Examples:

Avg return average value of n

Syntax:

Avg ([distinct/all]n)
Min return minimum value of expr.

Syntax:

MIN((distinct/all)expr)

Count Returns the no of rows where expr is not null

Syntax:

Count ([distinct/all]expr)

Count (*) Returns the no rows in the table, including duplicates and those with nulls.

Max Return max value of expr

Syntax:

Max ([distinct/all]expr)

Sum Returns sum of values of n

Syntax:

Sum ([distinct/all]n)

Sorting of data in table

Syntax:

Select columnname, columnname

From table

Order by columnname;

Assignment No. # 2

Question.1 Using the table client master and product master answer the following Questionnaires.

- i. Change the selling price of '1.44 floppy drive' to Rs.1150.00
- ii. Delete the record with client 0001 from the client master table.
- iii. Change the city of client_no '0005' to Bombay.
- iv. Change the bal_due of client_no '0001' to 1000.
- v. Find the products whose selling price is more than 1500 and also find the new selling price as original selling price *15.
- vi. Find out the clients who stay in a city whose second letter is a.
- vii. Find out the name of all clients having 'a' as the second letter in their names.
- viii. List the products in sorted order of their description.
- ix. Count the total number of orders
- x. Calculate the average price of all the products.
- xi. Calculate the minimum price of products.
- xii. Determine the maximum and minimum prices . Rename the title as 'max_price' and min_price respectively.
- xiii. Count the number of products having price greater than or equal to 1500.