ORACLE

Oracle Content (2 Months): -



Topic-1: -DBMS

Topic-2: - ORACLE

Topic-3: - SQL

->Introduction to SQL

->Sub-Languages of SQL

->Datatypes in oracle SQL

->Operators in oracle SQL

->Functions in oracle SQL

->Clauses in oracle SQL

->Joins

-.>Constraints

->Subqueries

->Views

->Sequences

->Indexes

Topic-4: - Normalization

->What is Normalization?

->Where do we want to use Normalization?

->Why do we need Normalization?

->Types of Normalization

>First normal form

>Second normal form

>Third normal form

>BCNF (Boyce-Codd normal form)

>Fourth normal form

>Fifth normal form

Topic-5: - PL/SQL

->Introduction to PL/SQL

->Difference between SQL and PL/SQL

->Conditional & Looping statements

->Cursors

->Exception Handling

->Stored procedures

->Stored Functions

->Triggers

**ORACLE**

->In IT field users are interacting with two types of applications. Those are

1.Front End Applications

2.Back End Applications

1) Front-End Application: -

->FEA is an application where the end-users interact to an application directly.

Ex: - Register from, Login Form, View Profile forms, Home page, etc.

->UI technologies are HTML, CSS, JavaScript, Angular JS, React JS, etc.

2) Back-End-Application: -

->BEA is an application where we store the end-user’s data/information.

Ex: - Database.

->DB technologies are ORACLE, SQL SERVER, MYSQL, POSTGRESQL, DB2, etc.

=> Server- Side Technologies: -

-> These technologies are used to establish a connection between front end application and back- end application.

-> Server- Side Technologies are Java, .Net, Python, PHB, etc.

SERVER

Java

JDBC

FEA

.Net

Database

ADO.NET

UI Form

**Topic – 1(DBMS)**

=> What is Data?

->It is a raw fact. (i.e. Characters, Numbers, Special characters and Symbols)

->Data never gives meaningful statements to users.

Ex: - SMITH is data 10021 is data

MILLER is data 10022 is data

ADAMS is data 10023 is data

=>What is information?

->Processing data is called information.

->Information always provides meaningful statements to users

Ex: - Employee Name Employee Id

SMITH 10021

MILLER 10022

ADAMS 10023

=>What is Database?

->It is a memory which is used to store inter-related information of a particular organization.

=>What is inter-related information?

->Depends on each other.

Ex: - SBI Organization

-group of branches ----------------🡪Group of Customers

>group of departments

>group of employees.

Ex: - no department = no employees

no employees = no department

no customers = no products

no products = no customers.

=>Types of Databases?

->There are two types of databases in the real world. Those are

1.OLTP ( Online Transaction Processing )

2.OLAP ( Online Analytical Processing )

1.OLTP: -

->These databases are used for saving/storing “day-to-day” transactional information.

Ex: - Oracle, SQL SERVER, MySQL, PostgreSQL, Db2, etc.

2.OLAP: -

->These databases are used for storing “historical data/information “. (i.e. Bigdata)

Ex: - Data Warehouse (DWH)

OLAP db (dw)

Day-to-day

OLTP DB

App1

Day-to-day

ETL

App2

E-Extract

T-Transfer

L-Loading

User

Day-to-day

App3

Ex: - Informatica, SSLS (msbi), power bi, Apache airflow.

=> What is DBMS?

->It is software which is used to manage and maintain data/information within the database memory.

->By using DBMS s/w we will perform the following operations are:

>Creating database

>Creating tables

>Inserting data

>Updating data

>Selecting data

>Deleting data

->Here DBMS s/w will act as an interface between user and database.

USER

DBMS s/w (Interface)

Database

=> DBMS models?

->There are three types of DBMS models are there. Those are

1.Hierarchial Database Management System (HDBMS)

Ex: - IMS s/w (Information Management System).

2.Network Database Management System (NDBMS)

Ex: - IDBMS s/w (Integrated database management system)

NOTE: - HDBMS, NDBMS models are outdated in real time.

3. Relational Database Management System (RDBMS):

->There are two modules in RDBMS, those are

i. Object Relational Database Management System (ORDBMS)

ii. Object Oriented Database Management System (OODBMS)

i. ORDBMS: -

->Data can be stored/organized in the form of tables.

->A table is a collection of rows and columns

>Rows can be called as “record/tuples”.

>Columns can be called ad “attributes/fields”.

->A row is nothing but a group of columns in a table.

-> These databases are depending on “SQL”. So that these are called as “SQLDATABASES” in real-time.

Ex: - Oracle, SQL Server, MySQL, Db2, etc.

ii. OODBMS: -

->Data can be stored/organized in the form of “objects”.

->These databases are depending on “OOPS Concept “but not SQL. So that these are called as “NOSQL DATABASES” in real time.

**TOPIC-2(ORACLE)**

=> Introduction to Oracle: -

-> Oracle is an RDBMS product/ORDBMS module which was introduced by “Oracle Corporation” in 1979. Oracle is used to store data/information permanently and security.

->Oracle can be deployed in any platform like Windows, Linux, Unix, Solaris, MAC,. Etc.

->Oracle is a platform independent an RDBMS product.

=>What is platform?

->It is combination of operating systems and Micro Processor.

->There are two types of platforms. Those are

i. Platform dependent

ii. Platform independent

i. Platform dependent: -

->It supports only one operating system with the combination of any micro-processor.

Ex: - Cobal, Pascal, C++, C.

ii. Platform independent: -

->It supports any operating system with the combination of any micro-processor.

Ex: - Oracle, Java, .net core, Python, Etc.

=>Types of oracle software editions: -

There are two types of editions. Those are

i. Oracle Express Edition: -

->Supporting partial features of oracle.

Ex: - recycle bin, flash back, purge, partition, tables, are not allowed.

ii. Oracle Enterprise Edition: -

->Supporting all features of oracle.

Ex: - recycle bin, flashback, purge, partition, tables, are allowed.

=>Versions of oracle software’s: -

->The first version of oracle software is “Oracle 1.0”.

- Oracle 1.0

- Oracle 2.0

- Oracle 3.0

- Oracle 4.0

- Oracle 5.0

- Oracle 6.0

- Oracle 7.0

- Oracle 8.0

- Oracle 8i (Internet)

- Oracle 9i

- Oracle 10g (Grid technologies)

- Oracle 11g

- Oracle 12c (Cloud technologies)

- Oracle 18c

- Oracle 19c

- Oracle 20c

- Oracle 21c

- Oracle 23c (Beta Version)

=>How to download oracle 19c enterprise edition software: -

->Supports on WOS-10 or WOS-11. WOS [Windows Operating System]

->Supports on Hard Disk (HD)-500gb, SSD – 60, RAM – 1gb+.

->It’s only valid for 90 days (3 months).

->For downloading oracle s/w we should create an account in oracle website.

->Download URL= ([https://www.oracle.com/in/database/technologies/oracle 19c-windows-download.html](https://www.oracle.com/in/database/technologies/oracle%2019c-windows-download.html)).

=>How to install oracle 19c/21c enterprise edition software: -

->Follow the provided video in google classroom.

NOTE: -

->Once we installed oracle software there are two components installed in the system.

i. Client Component

ii. Server Component

i. Client Component: -

->By using client components, we will perform the following three steps:

Step-1: - User can connect to oracle server: -

Enter username : System (default username)

Enter password : LION (Created at installation level)

CONNECTED>>

Here, Username is not case-sensitive, but password is case-sensitive.

Step-2: - User can send requests to an oracle server: -

Request: SQL query/SQL Command.

Step-3: - User can get response from oracle server: -

Response: Result/Output.

Ex: - Client tools = {SQL PLUS [CUI (Character user interface) Environment, Manual Coding, using this s/w for whole oracle course], SQL Developer, Toad [These two are GUI (Graphical user interface) Environment]

ii. Server Components: -

->There are two more sub-components in Server.

a. Instance

b. Database

a. Instance: -

->It is a temporary memory which will be allocated from RAM (Random Access Memory).

->Here, data can be stored temporarily

b. Database: -

->It is a permanent memory which will be allocated from Hard Disk.

->Here, data can be stored permanently.

Ex: - ATM (Automatic Teller Machine) is the real time example.

SERVER

🡺**Client-Server Architecture: -**

CILENT

2.Database

Request to

1.Instance

Client Tools:

SQL PLUS, TOAD,SQL DEVELOPER,SQL NAVIGATOR,…etc.

Temporary Storage

Permanent Storage

Instance Memory

(allocate from RAM)

USER

Response from

DATABASE MEMORY

(Allocates from HD)

NOTE: -

->When we want to work with oracle database server. We need to follow the following two procedures

Step-1: Connect

Step-2: Communicate

Step-1: - Connect:

->When we want to connect to oracle, we need a client tool is known as “SQLPLUS”

Step-2: - Communicate:

->When we want to communicate with database we need a database language is known as “SQL”.

🡺SQL PLUS vs SQL: -

|  |  |
| --- | --- |
| SQL PULS | SQL |
| 1.It is a client tool which was introduced by “Oracle corporation”. | 1.It is a database language which was introduced by “IBM”. |
| 2.It is used to connect to an oracle server. | 2.It is used to communicate with database. |
| 3.It will act as an editor for writing & executing SQL queries and PL/SQL programs | 3. SQL contains the following five sub-languages are (DDL, DML, DQL/DRL, TCL, DCL) used to perform some operations over database. |

=> How to connect to oracle server: -

> Go to all programs

> Open oracle – oraDB19home | folder

> Click on SQLPLUS icon

Enter username: SYSTEM

Enter password: LION

Connected.

=> How to create a new username and password in oracle:

Syntax: -

Create user <username> identified by <password>;

Ex: -

SQL> CONN

Enter username: SYSTEM/LION

Connected.

SQL> CREATE USER MYDB9AM IDENTIFIED BY 123.

User created.

SQL> CONN

Enter username: MYDB9AM/123

Error:

ORA-01045: User MYDB(AM lacks CREATE SESSION privileges;

Logon denied.

NOTE: -

->In oracle database server every new user is called as “dummy user” (i.e., no permission)

If the user want to connect to oracle server then the user need a permission from DBA (System).

=> How to give all permissions to user:

Syntax:

Grant <privilege name> to <username>;

Ex:

SQL> CONN

Enter username: SYSTEM/LION

Connected.

SQL> GRANT DBA TO MYDB9AM ;

Grant succeeded.

SQL> CONN

Enter username: MYDB9AM

Enter password: 123

Connected.

=> How to change password for user:

Syntax:

Password;

Ex:-

SQL> CONN

Enter username: MYDB9AM/123

Connected.

SQL> PASSWORD;

Changing password for MYDB9AM

Old password: 123

New password: ABC

Retype new password: ABC

Password changed.

SQL> CONN

Enter username; MYDB9AM/ABC

Connected.

=> How to re-create a new password if we forget it:

Syntax:

Alter user <username> identified by <new password>;

Ex:-

SQL> CONN

Enter username: SYSTEM/LION

Connected.

SQL>ALTER USER MYDB9AM IDENTIFIED BY MYDB9AM;

User altered.

SQL> CONN

Enter username: MYDB9AM/MYDB9AM

Connected.

=> How to view usernames in oracle if we forget it:

Syntax:

Select username from all\_users;

Ex: -

SQL> CONN

Enter username: SYSTEM/LION

Connected.

SQL> SELECT USERNAME FROM ALL\_USERS;

=> How to drop a user:

Syntax:

Drop user <username> cascade;

Ex: -

SQL> CONN

Enter username: SYSTEM/LION

Connected.

SQL> DROP USER MYDB9AM CASCADE;

User dropped.

=> How to clear the screen of SQL plus editor:

Syntax:

Cl scr;

Ex: -

SQL> CL SCR;

=> How to disconnect from oracle server:

Syntax:

Exit;

Ex: -

SQL> EXIT;

**TOPIC-3(SQL)**

🡺Introduction to SQL: -

->SQL [Structured Query Language] is database language which was introduced by “IBM”.

->SQL is used to communicate with any database in real-time.

Ex:- Oracle, MySQL, SQL server, db2, Sybase, PostgreSQL, etc.

-> Initially SQL is called as “SEQUEL” language and later renamed as “SQL”.

-> SQL is not a case-sensitive language. i.e. user can write SQL queries in either upper/lower/combination of upper and lower case characters.

Ex: -

SELECT \* FROM EMP; -----------🡪executed

Select \* from emp; ------------------🡪executed

Select \* From Emp; -----------------🡪executed

-> In oracle storage of data is a case-sensitive.

-> Every SQL query should ends with “;” (Semi-colon).

🡺Sub – Languages of SQL :

1. Data Definition Language (DDL) :

-> CREATE

-> ALTER

> ALTER – MODIFY

> ALTER – ADD

> ALTER – RENAME

> ALTER – DROP

-> RENAME

-> TRUNCATE

-> DROP

==>New features in oracle-10g enterprise edition are :

-> RECYCLEBIN

-> FLASHBACK

->PURGE

2. Data Manipulation Language (DML) :

-> INSERT

-> UPDATE

-> DELETE

3. Data Query/Retrieval Language (DQL/DRL) :

-> SELECT (read only)

4. Transaction Control Language (TCL) :

-> COMMIT

-> ROLLBACK

-> SAVEPOINT

5. Data Control Language (DCL) :

-> GRANT

-> REVOKE

=========================================================

1. (DDL) :

=> CREATE: -

-> It is used to create a new database object such as Table, View sequence, Index, Procedure, Function, Triggers, etc.

\* How to create a new table in oracle :

Syntax:

Create table <table name>(<Column name 1)<data type>[size], <Column name 2)<data type>[size], <Column name 3)<data type>[size],…);

\* Data types in oracle:

-> Data type is an attribute which is used to store “What type data” into a column.

-> Oracle supports the following datatypes are,

>Number datatype

>Character/String datatype

>Long datatype

>Date datatype

> Raw & long raw datatype

> LOB datatype

i. Number datatype:

a. Number (p)

b. Number (p,s)

a. Number (p):

-> To store integer format data only.

b. Number (p,s):

-> To store integer and also float values.

Precision (p) :

-> Counting all digits including left and right sides of a decimal point in the expression.

-> The maximum size of precision is 38 digit.

Ex:- 126 🡺 p=3

756323 🡺 p=6

45.23 🡺 p=4

9585.35 🡺 p=6

Scale (s):

-> Counting the right-side digits of a decimal point in the expression.

-> There is no maximum size of scale because it is a part of precision value.

Ex: - 45.23 🡺 p=4, s=2

9585.351 🡺 p=7, s=3

NOTE: - Here the scale should be less than the precision value.

Ex: -

Sno number (3) PRICE number (8,2)

0 0.0

1 25.18

2 85.17

. .

. .

. .

. .

999 999999.99

1000 – error 1000000(1000000.00) – error

ii. Character/String datatype: -

-> Storing string format data only.

-> In database string can be represents with ‘<string>’.

Ex:- ENAME Char (10)

Smith -> Error

‘Smith’ -> Smith (Accepted)

1234 -> Error

‘1234’ -> 1234

34.12 -> Error (Accepted)

’34.12’ -> 34.12 (Accepted)

String Format

||

Characters only String Alphanumeric String Format

Format ||

|| [A-Z, a-z, 0-9, @,$,#,.etc]

[A-Z, a-z] Ex:-‘Smith123@gmail.com’

Ex:- ‘smith’, ‘SMITH’, .etc ,Pan Card, HTNO,.etc..

Types Of String Datatypes: -

-> These datatypes again classified into two types.

1. Non-unicode datatype: -

-> Supplying to store “localized data”.(i.e., English Language only)

i. Char (size)

ii. Varchar2 (size)

i. Char (size): -

->It is a fixed length datatype(i.e., Static memory)

-> It will store non-unicode character in the form of 1 char = 1 byte.

-> The maximum size of char datatype is 2000 bytes.

=> Disadvantage: -

-> Memory wasted because of it is static.

ii. Varchar2 (size): -

-> It is a variable length datatype (i.e dynamic memory)

-> It will store non-unicode characters in the form of 1 char = 1 byte

-> The maximum size of varchar2 datatype is 4000 bytes.

=>Advantage: -

-> Memory saved not wasted.

Fixed Length Datatype

NAME CHAR (10)

10 Bytes

‘HELLO’

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| H | E | L | L | O |  |  |  |  |  |

HELLO

HEL

HE

‘HEL’

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| H | E | L |  |  |  |  |  |  |  |

HERE, memory wasted.

‘HE’

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| H | E |  |  |  |  |  |  |  |  |

Variable Length Datatype

NAME VARCHAR2 (10)

10 Bytes

‘HELLO’

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| H | E | L | L | O |

HELLO

HEL

HE

‘HEL’

|  |  |  |
| --- | --- | --- |
| H | E | L |

HERE, No memory wasted.

‘HE’

|  |  |
| --- | --- |
| H | E |

2. Unicode datatypes: -

-> Supporting to store “globalized data” (i.e. All National Language)

i. NChar (size)

ii. NVarchar (size)

Here, N stands for ‘National Language’-[196 languages]

i. NChar (size) :

-> It is a fixed length datatype (i.e, Static memory)

-> It will store Unicode characters in the form of 1 Char = 1 byte.

-> The maximum size of NChar datatype is 2000 bytes.

Disadvantages: -

->Memory wasted.

ii. NVarchar2 (size) :

-> It is a variable length datatype (i.e, dynamic memory)

-> It will store Unicode characters in the form of 1 char = 1 byte.

-> The maximum size of Nvarchar2 datatype is 4000 bytes.

Advantages: -

-> Memory saved.

\* Long datatype: -

-> It is a variable length datatype(i.e, dynamic memory)

-> It will store both non-unicode & Unicode characters in the form of 1 char = 1 byte.

-> The maximum size of long datatypes is 2gb.

\* Date datatype: -

-> To store date and time information of a particular day/transaction.

-> The range of date datatype in oracle is ’01-JAN-4712’BC to ’31-DEC-9999’ AD.

-> There are two types of date datatypes

a. Date

b. Timestamp

a. Date :-

-> It will store date and time information but time is optional.

-> When user did not insert time in oracle will take time ’00:00:00 am’ by default.

-> By default format of oracle is ‘DD:MON:YY/YYYY HH:MI:SS’

-> The maximum size is 7 bytes and it is a fixed memory.

Ex: - ‘DD-MON-YY/YYYY HH:MI:SS’

’04-JAN-25/2025 00:00:00

1 1 2 1 1 1 🡪7 bytes(fixed)

-> Even if we not provide time value it will take 7 bytes.

b. Timestamp: -

-> It will store date and time information along with milliseconds.

-> The default format of timestamp is ‘DD:MON-YY/YYYY HH:MI:SS:MS’

-> The maximum size is 11 bytes and it is a fixed memory.

Ex: - ‘DD-MON-YY/YYYY HH:MI:SS:MS’

’01-JAN-25/2025 00:00:00:00’

1 1 2 1 1 1 4 🡪11 bytes

\* Raw and Long Raw Datatypes: -

-> These datatypes are used for storing image file/audio file/video files in the form of 01010101010 binary format.

>Raw - Static datatype - 2000 bytes

>Long Raw - Dynamic datatype - 2gb

\* LOB datatype: -

-> LOB stands for large objects datatype

i. BLOB

ii. CLOB

iii. NCLOB

i. BLOB :-

-> It stands for binary large object.

-> It will store image/audio/video files in the form of 010101010001 binary format.

-> It is dynamic datatype.

-> The maximum size is 4gb.

ii. CLOB :-

-> It stands for Character Large Object.

-> It will store non-unicode characters in the form of 1 char = 1 byte

-> It is a dynamic datatype.

-> The maximum size is 4gb.

iii. NCLOB :-

-> It stands for National Character Large Object.

-> It will store Unicode characters in the form of 1 char = 1 byte.

-> It is a dynamic datatype.

->The maximum size is 4gb.

🡺Non-Unicode Characters:-

* Char (size) - 2000 bytes
* Varchar (size) - 4000 bytes
* Long - 2gb
* CLOB - 4gb

🡺Unicode Characters:-

* NChar (size) - 2000 bytes
* NVarchar (size) - 4000 bytes
* Long - 2gb
* NCLOB - 4gb

🡺Binary data:-

* Raw - 2000 bytes
* Long Raw - 2gb
* BLOB - 4gb

\* How to create a new table in oracle :-

Syntax:-

Create table <table name>(<column name1><datatype>[size],<column name2><datatype>[size],…);

Ex:-

SQL>CONN

Enter user-name: MYDB9AM/MYDB9AM

Connected

SQL> CREATE TABLE STUDENT(STID NUMBER(4),SNAME CHAR(8),SFEE(8,2));

Table created.

\* How to view the structure of a table in oracle:-

Syntax:-

Desc <table name>; (describe command)

Ex:-

SQL> DESC STUDENT;

\* How to view list of table in oracle window:-

Syntax:-

Select \* from tab; (TAB is pre-defined table)

Ex:-

SQL> SELECT \* FROM TAB;

==> ALTER:

-> It is used to modify/change the structure of a table.

-> There are four sub-commands of alter.

i. ALTER-MODIFY

ii. ALTER-ADD

iii. ALTER-RENAME

iv. ALTER-DROP

i. ALTER-MODIFY:

-> To change datatype from one datatype to another datatype and also the size of the datatype of a specific datatype.

Syntax:-

ALTER TABLE<TABLE NAME>MODIFY<COLUMN NAME><NEW DATATYPE>[NEW SIZE];

Ex:

SQL> ALTER TABLE STUDENT MODIFY SNAME VARCHAR2(20);

ii. ALTER-ADD:

->To add new column to an existing table

Syntax:

ALTER TABLE <TABLE NAME>ADD NEW<NEW COLUMN NAME><DATATYPE>[SIZE];

Ex:

ALTER TABLE STUDENT ADD SADDRESS VARCHAR2(50);

iii. ALTER-RENAME:

->To rename a column name in the table.

Syntax:

ALTER TABLE<TABLE NAME>RENAME COLUMN<OLD COLUMN NAME>TO<NEW COLUMN NAME>;

Ex:

ALTER TABLE STUDENT RENAME COLUMN SNAME TO STUDENT NAMES;

iv. ALTER-DROP:

->To drop/delete a column from an existing table.

Syntax:

ALTER TABLE<TABLE NAME>DROP COLUMN<COLUMN NAME>;

Ex:

ALTER TABLE STUDENT DROP COLUMN SFEE;

==> RENAME:

->To change a table name.

Syntax:

RENAME<OLD TABLE NAME>TO<NEW TABLE NAME>;

Ex:

SQL> RENAME STUDENT TO STUDENT\_DETAILS;

SQL> RENAME STUDENT\_DETAILS TO STUDENT;

==> TRUNCATE:

->Deleting all rows but not columns of table.

->We cannot delete a specific row from a table by using TRUNCATE because it does not allow “WHERE” clause condition.

->Deleting all rows from a table permanently

Syntax:

TRUNCATE TABLE<TABLE NAME>;

Ex:

SQL> TRUNCATE TABLE STUDENT WHERE STID=1001; --NOT ALLOWED.

SQL> TRUNCATE TABLE STUDENT; --ALLOWED.

==> DROP:

-> To drop the entire table. (i.e., collection of rows & columns)

Syntax:

DROP TABLE<TABLE NAME>;

Ex:

SQL> DROP TABLE STUDENT;

-> Before oracle-10g enterprise edition once we drop a table from a database then it was permanently deleted. Whereas from oracle-10g enterprise once we drop a table from a database then it was temporarily deleted.

\* New features in the oracle-10g enterprise edition:

- RECYCLEBIN

- FLASHBACK

- PURGE

==> RECYCLEBIN:

-> It is a system defined table which is used to store the information about deleted tables from database.

-> It is a similar to recyclebin in a computer.

\*. How to view deleted tables in recyclebin;

Syntax:

SELECT OBJECT NAME, ORIGINAL\_NAME FROM RECYCLEBIN;

OBJECT\_NAME ORIGINAL\_NAME

BIN$LMtpjn+7TWOIFBg2W+UBIQ==$O STUDENT

==> FLASHBACK:

-> It is a DDL command which is used to restore a table from recyclebin to database.

Syntax;

FLASHBACK TABLE<TABLE NAME>TO BEFORE DROP;

Ex:

SQL> FLASHBACK TABLE STUDENT TO BEFORE DROP;

==> PURGE:

->It is DDL command which is used to drop a table permanently.

Syntax:

DROP TABLE<TABLE NAME>PURGE;

Ex:

SQL> DROP TABLE STUDENT PURGE;

2. DATA MANIPULATE LANGUAGE(DML):

==> INSERT:

-> To insert a new row.(i.e., data) into a table.

-> There are two methods to insert data into a table.

METHOD-1:

-> To insert values for all columns.

Syntax:

INSERT INTO<TABLE NAME>VALUES(VALUE 1,VALUE 2,…);

Ex:

SQL> INSERT INTO STUDENT VALUES(1021,’SMITH’,25000);

METHOD-2:

-> To insert values for required columns.

Syntax:

INSERT INTO<TABLE NAME>(REQUIRED COLUMN NAMES)VALUES(VALUE 1,VALUE 2,……);

Ex:

SQL> INSERT INTO STUDENT(STID) VALUES (1022);

SQL> INSERT INTO STUDENT (STID, SFEE) VALUES (1023,32000);

SQL> INSERT INTO STUDENT (STID, SNAME, SFEE) VALUES(‘1024’,’ALLEN’,45000);

SQL> INSERT INTO STUDENT (SNAME, SFEE, STID) VALUES(MILLER’,18000,1025);