**EXPERIMENT-2**

**AIM**:-To study the various DML commands and implement them on the database.

**FACILITIES REQUIRED:**

|  |  |  |
| --- | --- | --- |
| **Serial No.** | **Facilities required** | **Quantity** |
| 1 | System | 1 |
| 2 | Operating System | Windows |
| 3 | Front End |  |
| 4 | Backend | Oracle Apex |

**PROCEDURE**:

|  |  |
| --- | --- |
| **Step no.** | **Details of the step** |
| 1 | **DML COMMAND**  DML commands are the most frequently used SQL commands and is used to query and manipulate the existing database objects. Some of the commands are Insert, Select, Update, Delete |
| 2 | **Insert Command**  This is used to add one or more rows to a table. The values are separated by commas and the data types char and date are enclosed in apostrophes. The values must be entered in the same order as they are defined. |
| 3 | **Select Commands**  It is used to retrieve information from the table. it is generally referred to as querying the table. We can either display all columns in a table or only specify column from the table. |
| 4 | **Update Command**  It is used to alter the column values in a table. A single column may be updated or more than one column could be updated. |
| 5 | **Delete command**  After inserting row in a table we can also delete them if required. The delete command consists of a clause followed by an optional where clause. |

**SQL Commands:**

**INSERT COMMAND**

**Inserting a single row into a table:**

Syntax: insert into <table name> values (value list)

Example: insert into s values (‘s3’,’sup3’,’blore’,10)

**Inserting more than one record using a single insert commands:**

Syntax: insert into <table name> values (&col1, &col2, ….)

Example: Insert into stud values (&reg, ‘&name’, &percentage);

**Skipping the fields while inserting:**

Insert into <tablename (coln names to which data to be inserted)> values (list of values);

Other way is to give null while passing the values.

**SELECT COMMANDS**

**Selects all rows from the table**

Syntax: Select \* from tablename;

Example; Select \* from IT;

**The retrieval of specific columns from a table**:

It retrieves the specified columns from the table

Syntax: Select column\_name1, ….., column\_name from table name;

Example: Select empno, empname from emp;

**Elimination of duplicates from the select clause:**

It prevents retriving the duplicated values .Distinct keyword is to be used.

Syntax: Select DISTINCT col1, col2 from table name;

Example: Select DISTINCT job from emp;

**Select command with where clause:**

To select specific rows from a table we include ‘where’ clause in the select command. It can appear only after the ‘from’ clause.

Syntax: Select column\_name1, …..,column\_name from table name where condition;

Example: Select empno, empname from emp where sal>4000;

**Select command with order by clause:**

Syntax: Select column\_name1, …..,column\_namen from table name where condition order by colmnname;

Example: Select empno, empname from emp order by empno;

**Select command to create a table**:

Syntax: create table tablename as select \* from existing\_tablename;

Example: create table emp1 as select \* from emp;

**Select command to insert records:**

Syntax: insert into tablename ( select columns from existing\_tablename);

Example: insert into emp1 ( select \* from emp);

**UPDATE COMMAND**

Syntax:update tablename set field=values where condition;

Example:Update emp set sal = 10000 where empno=135;

**DELETE COMMAND**

Syntax: Delete from table where conditions;

Example:delete from emp where empno=135;

**Queries: Q1: Insert a single record into dept table.**

Ans: SQL> insert into DEPT\_DISHA\_171 values (1,'IT','Tholudur');

**Q2: Insert more than a record into emp table using a single insert command**

Ans: SQL> insert into EMP\_DISHA\_171 values(1,'Mathi','AP',1,10000);

insert into EMP\_DISHA\_171 values(2,'Arjun','ASP',2,12000);

insert into EMP\_DISHA\_171 values(3,'Gugan','ASP',1,12000);

**Q3: Update the emp table to set the salary of all employees to Rs15000/- who are working as ASP**

Ans: SQL> update EMP\_DISHA\_171 set sal=15000 where job='ASP';

**Q4: Create a pseudo table employee with the same structure as the table emp and insert rows into the table using select clauses**.

Ans: SQL> create table EMPLOYEE as select \* from EMP\_DISHA\_171;

**Q5: select employee name, job from the emp table**

Ans: SQL> select ename, job from EMP\_DISHA\_171;

**Q6: Delete only those who are working as Assistant Professor**

Ans: SQL> delete from EMP\_DISHA\_171 where job= 'AP’ ;

**Q7: List the records in the emp table orderby salary in ascending order.**

Ans: SQL> select \* from EMP\_DISHA\_171 order by sal;

**Q8: List the records in the emp table orderby salary in descending order.**

Ans: SQL> select \* from EMP\_DISHA\_171 order by sal desc;

**Q9: Display only those employees whose deptno is 1.**

Ans: SQL> select \* from EMP\_DISHA\_171 where deptno=1;

**Q10: Display deptno from the table employee avoiding the duplicated values.**

Ans: SQL> select distinct deptno from EMP\_DISHA\_171;

**Result:**

Thus, the DML commands using from where clause was performed successfully and executed.