EX.NO:1 IMPLEMENTATION OF DDL COMMANDS

AIM:

To create a DDL to perform creation of table, alter, modify and drop columns.

DDL COMMANDS

1. The Create Table Command: - it defines each column of the table uniquely. Each column has minimum of three attributes, a name , data type and size.

Syntax:

Create table <table name> (<col1> <datatype>(<size>),<col2> <datatype><size>));

Ex:create table emp(empno number(4) primary key, ename char(10));

2. Modifying the structure of tables. a)

Add new columns

Syntax:

Alter table <tablename> add(<new col><datatype(size),<new col>datatype(size));

Ex:alter table emp add(sal number(7,2));

3. Dropping a column from a table.

Syntax:

Alter table <tablename> drop column <col>;

Ex:alter table emp drop column sal;

4. Modifying existing columns.

Syntax:

Alter table <tablename> modify(<col><newdatatype>(<newsize>));

Ex:alter table emp modify(ename varchar2(15));

5. Renaming the tables

Syntax:

Rename <oldtable> to <new table>;

Ex:rename emp to emp1;

6. truncating the tables.

Syntax:

Truncate table <tablename>;

Ex:trunc table emp1;

7. Destroying tables.

Syntax:

Drop table <tablename>;

Ex:drop table emp;

CREATION OF TABLE:

SYNTAX:

create table<tablename>(column1 datatype,column2 datatype...);

EXAMPLE:

SQL>create table std(sno number(5),sname varchar(20),age number(5),sdob date,sm1

number(4,2),sm2 number(4,2),sm3 number(4,4)); Table created.

SQL>insert into std values(101,"AAA",16,"03-jul-88",80,90,98); 1row

created.

SQL>insert into std values(102,"BBB",18,"04-aug-89",88,98,90); 1 row

created.

OUTPUT:

Select * from std;

SNO	SNAME	AGE	SDOB	SM1	SM2	SM3
101	AAA	16	03-jul-88	80	90	98
102	BBB	18	04-aug-89	88	98	90

ALTER TABLE WITH ADD:

SQL>create table student(id number(5),name varchar(10),game varchar(20));

Table created.

SQL>insert into student values(1,"mercy","cricket"); 1 row

created.

SYNTAX:

alter table<tablename>add(col1 datatype,col2 datatype..);

EXAMPLE:

SQL>alter table student add(age number(4));

SQL>insert into student values(2,"sharmi","tennis",19);

OUTPUT:

ALTER: select * from student;

ID NAME GAME

1 Mercy Cricket

ADD: select * from student;

ID NAME GAME AGE

1 Mercy cricket

2 Sharmi Tennis 19

ALTER TABLE WITH MODIFY:

SYNTAX:

Alter table<tablename>modify(col1 datatype,col2 datatype..);

EXAMPLE:

SQL>alter table student modify(id number(6),game varchar(25));

OUTPUT:

MODIFY

desc student;

NAME NULL? TYPE

Id Number(6)

Name Varchar(20)

Game Varchar(25)

Age Number(4)

DROP:

SYNTAX: drop table<tablename>;

EXAMPLE:

SQL>drop table student;

SQL>Table dropped.

TRUNCATE TABLE

SYNTAX: TRUNCATE TABLE <TABLE NAME>;

Example: Truncate table stud;

DESC

Example: desc emp;

Name Null? Type

EmpNo NOT NULL number(5)

EName VarChar(15)

Job NOT NULL Char(10)

DeptNo NOT NULL number(3)

PHONE_NO number (10)

Queries:

Q1. Create a table called EMP with the following structure.

Name Type

EMPNO NUMBER(6)
ENAME VARCHAR2(20)
JOB VARCHAR2(10)
DEPTNO NUMBER(3)
SAL NUMBER(7,2)
Allow NULL for all columns except ename and job.

Solution:

1. Understand create table syntax.
2. Use the create table syntax to create the said tables.
3. Create primary key constraint for each table as understand from logical table structure.

Ans:

SQL> create table emp(empno number(6),ename varchar2(20)not null,job varchar2(10) not null, deptno number(3),sal number(7,2));

Table created.

Q2: Add a column experience to the emp table.

experience numeric null allowed.

Solution:

1. Learn alter table syntax.
2. Define the new column and its data type.
3. Use the alter table syntax.

Ans: SQL> alter table emp add(experience number(2));
Table altered.

Q3: Modify the column width of the job field of emp table.

Solution:

1. Use the alter table syntax.
2. Modify the column width and its data type.

Ans: SQL> alter table emp modify(job varchar2(12));
Table altered.

SQL> alter table emp modify(job varchar(13));
Table altered.

Q4: Create dept table with the following structure.
Name Type

DEPTNO NUMBER(2)
DNAME VARCHAR2(10)
LOC VARCHAR2(10)
Deptno as the primarykey

Solution:

1. Understand create table syntax.
2. Decide the name of the table.
3. Decide the name of each column and its data type.
4. Use the create table syntax to create the said tables.
5. Create primary key constraint for each table as understand from logical table structure.

Ans:
SQL> create table dept(deptno number(2) primary key,dname varchar2(10),loc varchar2(10));
Table created.

Q5: drop a column ‘experience’ to the emp table.

Solution:

1. Learn alter table syntax. Use the alter table syntax to drop the column.

Ans:

SQL> alter table emp drop column experience; Table altered.

Q6: Truncate the emp table and drop the dept table

Solution:

1. Learn drop, truncate table syntax.

Ans: SQL> truncate table emp; Table truncated.

RESULT:

Thus the DDL commands have been executed successfully.