File 1; DBMS LAB ( Pending part of WEEk-1)

## Update the column details of job

SQL>update employee set job='trainee'

where empno=103;

1 row updated.

SQL>select \* from employee;

EMPNO ENAME JOB MGR SAL COMMISSION

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| 101abhi | manager | 1234 | 10000 | 70 |
| 102 rohith | analyst | 2345 | 9000 | 65 |
| 103 david | trainee | 3456 | 9000 | 65 |
| 104 rahul | clerk | 4567 | 7000 | 55 |
| 105 pramod | salesman | 5678 | 5000 | 50 |

## Rename the column of Employ table using alter command.

SQL>alter table employee rename column mgr to manager\_no;

Table altered.

SQL>desc employee;

Name Null? Type

-------------------EMPNO INT

ENAME VARCHAR(10)

JOB VARCHAR(10)

MANAGER\_NO INT

SAL INT

COMMISSION INT

## Delete the employee whose Empno is105.

SQL> delete employee where empno=105; 1 row deleted.

SQL>select \* from employee;

EMPNO ENAME JOB MANAGER\_NO SALCOMMISSION

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| 101abhi | manager | 1234 | 10000 | 70 |
| 102 rohith | analyst | 2345 | 9000 | 65 |
| 103 david | trainee | 3456 | 9000 | 65 |
| 104 rahul | clerk | 4567 | 7000 | 55 |

## Create department table with the following structure.

|  |  |
| --- | --- |
| **Name** | **Type** |
| Deptno | INT |
| Deptname | Varchar(10) |
| Location | Varchar(10) |

* + 1. Add column designation to the department table.
    2. Insert values into the table.
    3. List the records of dept table grouped by deptno.
    4. Update the record where deptno is 9.
    5. Delete any column data from the table.

**SOLUTION:**

SQL> create table department(deptno INT, deptname varchar(10), location varchar(10));

Table created.

|  |  |  |
| --- | --- | --- |
| SQL>desc department; |  | |
| Name | Null? | Type |
| - DEPTNO  DEPTNAME |  | INT VARCHAR(10) |
| LOCATION |  | VARCHAR(10) |

## Add column designation to the department table.

SQL> alter table department add(designation varchar(10));

Tablealtered.

SQL>desc department;

Name Null? Type

------------------- DEPTNO NU

MBER

DEPTNAME VARCHAR(10)

LOCATION VARCHAR(10)

DESIGNATION VARCHAR(10)

## Insert values into the table.

SQL> insert into department values(&deptno,'&deptname','&location','&designation'); Enter value for deptno: 9

Enter value for deptname: accounting Enter value for location: hyderabad Enter value for designation: manager

old 1: insert into department values(&deptno,'&deptname','&location','&designation') new 1:

insert into department values(9,'accounting','hyderabad','manager')

1row created. SQL> /

Enter value for deptno:10

Enter value for deptname:research

Enter valuefor location:chennai

Enter valuefor designation: professor

old1:insert into department values(&deptno,'&deptname','&location','&designation')

new 1: insert into department values(10,'research','chennai','professor')

1row created.

Enter remaining 11,12,9 rows.

SQL> /

SQL>select \* from department;

DEPTNO DEPTNAMELOCATION DESIGNATION

|  |  |  |  |
| --- | --- | --- | --- |
| 9 | accounting | hyderabad | manager |
| 10 | research | chennai | professor |
| 11 | sales | banglore | salesman |
| 12 | operations | mumbai | operator |
| 9 | accounting | chennai | manager |

## List the records of dept table grouped by deptno.

SQL>select deptno, deptname from department group by deptno, deptname;

DEPTNO DEPTNAME

9 accounting

12 operations

10 researches

11 sales

# WEEK-2

**QUERIES USING DDL AND DML**

1. **a. Create a user and grant all permissions to the user.**
   1. **Insert the any three records in the employee table and use rollback. Check the result.**
   2. **Add primary key constraint and not null constraint to the employee table.**
   3. **Insert null values to the employee table and verify the result.**

**SOLUTION:**

## Create a user and grant all permissions to the user.

CONNECT<USER-NAME>/<PASSWORD>@<DATABASENAME>;

--Create user query

CREATE USER<USERNAME>IDENTIFIED BY<PASSWORD>;

--Provide roles

GRANT CONNECT, RESOURCE, DBATO<USERNAME>;

--Assigning privileges

GRANT CREATE SESSION GRANT ANY PRIVILEGE TO

<USERNAME>;GRANT UNLIMITED TABLE SPACE TO

<USERNAME>;

--Provide access to tables.

GRANT SELECT, UPDATE, INSERT, DELETE ON <TABLE NAME> TO <USERNAME>;

## Insert the any three records in the employee table and use rollback. Check the result.

SQL>SELECT\*FROMEMPLOYEE;

EMPNOENAME JOB MANAGER\_NO SAL COMMISSION

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **101** | **abhi** | **manager** | | |  | **1234** | **1100** |  | **70** |
| **102** | **rohith** | **analyst** | | |  | **2345** | **9000** |  | **65** |
| david | trainee | | 3456 | 9000 | | 65 | | | |
| 104rahul | clerk | | 4567 | 7000 | | 55 | | | |

SQL> insert into employee values(&empno,'&ename','&job',&manager\_no,&sal,&commission);Enter value for empno: 105

Enter value for ename:aravindEntervalueforjob:salesmanEntervaluefor manager\_no: 5678 Enter value for sal: 5000

Enter value for commission: 50

old 1: insert into employee values(&empno,'&ename','&job',&manager\_no,&sal,&commission)new1:insertinto employee values(105,'aravind','salesman',5678,5000,50)

1 row created.

SQL>rollback;

Rollback complete.

SQL> SELECT \* FROM EMPLOYEE;

EMPNO ENAME JOB MANAGER\_NO SAL COMMISSION

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **101** | **abhi** | **manager** |  | **1234** | **1100** |  | **70** |
| **102** | **rohith** | **analyst** |  | **2345** | **9000** |  | **65** |
| **103** | **david** | **trainee** |  | **3456** | **9000** |  | **65** |
| **104** | **rahul** | **clerk** |  | **4567** | **7000** |  | **55** |

* 1. **Add primary key constraint and not null constraint to the employee table.** SQL>alter table employee modify(empno INT primary key,ename varchar(10) not null); Table altered.

SQL>desc employee;

Name Null? Type

- EMPNO NOTNULL INT

ENAME NOTNULL VARCHAR(10) JOB VARCHAR(10) MANAGER\_NO INT SALINT

COMMISSION INT

## Insert null values to the employee table and verify the result.

SQL>desc employee;

Name Null? Type

-------------------EMPNO NOTNULL

INT

ENAME NOTNULL VARCHAR(10)

JOB NOTNULL

VARCHAR(10)

MANAGER\_NO SAL

INT NOTNUL

L INT

COMMISSION INT

SQL> insert into employee values(&empno,'&ename','&job',&manager\_no,&sal,&commission);

Enter value for empno: 105

Enter value for ename:mohith

Entervalueforjob:salesman

Enter value for manager\_no: 5678

Enter value for sal: null

Enter value for commission:50 old 1: insert into employee

values(&empno,'&ename','&job',&manager\_no,&sal,&commission)new1: insert into employee values(105,'mohith','salesman',5678,null,50)

Insert into employee values (105,'mohith','salesman', 5678, null,50)

\*

## create a user and grant all permissions to the user.

## Insert values in the department table and use commit.

**Add constraints like unique and not null to the department table. Insert repeated values and null values into the table.**

**SOLUTION:**

## Create a user and grant all permissions to the user.

CONNECT<USER-NAME>/<PASSWORD>@<DATABASENAME>;

--Create user query

CREATE USER<USERNAME>IDENTIFIEDBY<PASSWORD>;

--Provide roles

GRANT CONNECT,RESOURCE,DBATO<USERNAME>;

--Assigning privileges

GRANT CREATE SESSION GRANT ANY PRIVILEGE TO<USERNAME>; GRANT UNLIMITED TABLESPACE TO <USER NAME>;

--Provide access to tables.

GRANT SELECT,UPDATE,INSERT,DELETEON<TABLENAME>TO

<USERNAME>;

## Insert values in the department table and use commit.

SQL>insert into department values (&deptno,'&deptname','&location');Enter value for deptno: 13

Enter value for deptname:sales

Enter value for location:delhi

old1:insert into department values(&deptno,'&deptname','&location')

new1: insert into department values(13,'sales','delhi')

1 row created.

SQL>commit;

Commit complete.

SQL> select \* from department; DEPTNO DEPTNAME LOCATION

accounting hyderabad research chennai

sales banglore

operations mumbai

9 accounting chennai

13sales delhi

6 rows selected.

## Add constraints like unique and not null to the department table.

SQL> alter table department modify(deptno INT unique); Table altered.

SQL> alter table department modify(location varchar(10) not null); Table altered.

SQL>DESC DEPARTMENT;

Name Null? Type

DEPTNO INT

DEPTNAME

VARCHAR(10)

LOCATION NOT NULL VARCHAR(10)

## Insert repeated values and null values into the table.

SQL>insert into department values(&deptno,'&deptname','&location');

Enter value for deptno:10

Enter value for deptname: research

Enter value for location:hyd

old1:insert into department values(&deptno,'&deptname','&location');

new1:insertintodepartment values(10,'research','');

insert into department values(10,'research','')

SQL>insert into department values(&deptno,'&deptname','&location');

Enter value for deptno:10

Enter value for deptname: research

Enter value for location: hyderabad

old1:insertintodepartment values(&deptno,'&deptname','&location')

new1:insertintodepartment values(10,'research','hyderabad')

## Update the record where deptno is 9.

SQL>update department set designation='accountant' where deptno=9; 2 rows updated.

SQL>select \* from department;

DEPTNO DEPTNAME LOCATION DESIGNATION

|  |  |  |  |
| --- | --- | --- | --- |
| 9 | Accounting | Hyderabad | accountant |
| 10 | Research | Chennai | professor |
| 11 | Sales | Banglore | salesman |
| 12 | Operations | Mumbai | operator |
| 9 | Accounting | Chennai | accountant |

## Delete any column data from the table.

SQL> alter table department drop(designation); Table altered.

SQL> select \* from department; DEPTNO DEPTNAME LOCATION

|  |  |  |
| --- | --- | --- |
| 9 | accounting | Hyderabad |
| 10 | research | Chennai |
| 11 | sales | Banglore |
| 12 | operations | Mumbai |
| 9 | accounting | Chennai |

WEEK 2 COMPLETED.