Ex.No.2 22.01.2025

## DATA MANIPULATION LANGUAGE, DATA CONTROL LANGUAGE COMMANDS AND TCL COMMANDS

#### <u>AIM</u>

To execute data manipulation language, data control language commands and TCL commands.

### DATA MANIPULATION LANGUAGE (DML):

#### 1. INSERTING VALUES TO THE TABLE

SQL> create table students(id number(5) primary key, name varchar(15), deptno number(2), maths number(2), english number(2));

Table created.

SQL> desc students

Name	Null?	Type	
ID	NOT NULL	NUMBER(5)	
NAME		VARCHAR2(15)	
DEPTNO		NUMBER(2)	
MATHS		NUMBER(2)	
ENGLISH		NUMBER(2)	
SQL> insert into	students values(00	001,'jai',10,75,80);	
1 row created.			
SOL> insert into	students values(00	002.'ram'.11.80.85):	

1 row created.

SQL> insert into students values(0003,'lax',11,85,70);

1 row created.

SQL> insert into students values(0004, 'mani', 10, 90, 75);

1 row created.

SQL> insert into students values(0005, 'alex', 11,85,90);

1 row created.

SQL> select \* from students;

ID	NAME	DEPTNO	MAT	HS	ENGLISH
0001	jai	10	75	80	)
0002	ram	11	80	85	5
0003	lax	11	85	70	)
0004	mani	10	90	75	j
0005	alex	11	85	90	)

# 2.<u>UPDATING THE VALUES IN THE TABLE</u>

0001	jai	10	75	80
0002	ram	11	80	85
0003	lax	11	85	75
0004	mani	10	90	75
0005	alex	11	85	75

SQL> update students set english=75 where maths=85; 2 rows updated.

SQL> select \* from students;

ID	NAME	DEPTNO	MATI	HS E	NGLISH
000	1 jai	10	75	80	
000	2 ram	11	80	85	
000	3 lax	11	85	75	
000	4 mani	10	90	75	
000	5 alex	11	85	75	

### 3.SELECT

### a) SELECT COLUMNS FROM THE TABLE

SQL> select id, maths from students;

0001	75

ID MATHS

0001	75
0002	80
0003	85
0004	90

0005 85

### b) SELECT ROWS FROM THE TABLE

SQL> select \* from students where maths>85;

#### ID NAME DEPTNO MATHS ENGLISH

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0004 mani 10 90 75

#### c) SELECT ENTIRE TABLE

SQL> select \* from students;

ID	NAME	DEPTNO	MATHS	ENGLISH
0001	jai	10	75	80
0002	ram	11	80	85
0003	lax	11	85	75
0004	mani	10	90	75
0005	alex	11	85	75

# 4.DELETE

SQL> delete from students where maths=85;

1 row deleted.

SQL> select \* from students;

ID	NAME	DEPTNO	MAT	THS	ENGLISH
0001	jai	10	75	80	)
0002	2 ram	11	80	85	5
0004	mani	10	90	75	;

# **ARRANGE IN ASCENDING ORDER**

SQL> select \* from students order by id;

ID	NA	ME	DEPTNO	MATH	S ENGLI	SH
						-
00	001	jai	10	75	80	
00	002	ram	11	80	85	
00	004	mar	ni 10	90	75	

# **ARRANGE IN DESCENDING ORDER**

SQL> select \* from students order by id desc;

ID	NA	AME	DEPTNO	MATHS	ENGLISH
000	)4	mani	10	90	75
000	)2	ram	11	80	85
000	)1	jai	10	75	80

# DATA CONTROL LANGUAGE(DCL):

#### 1.GRANT

### a) Grant all privilages

SQL> create user emp identified by us;

User created.

SQL> grant all on students to emp;

Grant succeeded.

### b) Grant some privilages of students

SQL> grant select, update, insert on students to emp with grant option;

Grant succeeded.

### 2.REVOKE

Revoke all privilages

SQL> revoke all on students from emp;

Revoke succeeded.

### TRANSACTION CONTROL LANGUAGE(TCL):

## 1.SAVE POINT

SQL> savepoint sp1;

Savepoint created.

### 2.ROLL BACK

SQL> roll back sp1;

Rollback complete.

#### 3.COMMIT

SQL> commit;

Commit complete.

# 4.<u>SET TRANSACTION</u>

SQL> set transaction read only;

Transaction set.

CONTENTS	MARKS ALLOTED	MARKS OBTAINED
Aim, Algorithm,	30	
SQL,PL/SQL		
Execution and Result	20	
Viva	10	
Total	60	

# **RESULT**

Thus data manipulation language, data control language commands and TCL commands were executed.