

Aim:- To study & implement Data definition language (DDL) command in relational database management system & DML commands in DBMS.

I) DDL COMMANDS:- are used to define, modify or delete the structure of database object such as tables.

1. Create table :- Create a new table in database query create table structure (to int primary key, string varc -or (50), . rolls, it, phone it);  
Create table employer (Empid int, Empname varchar (50));

Output:-

Table created (2)

2. Describe or Desc - Display structure of a tab

~~Query:-~~

Desc structure;

Output:-

Name	Type
stid	NOT NULL Number (3, 0)
student	varchar (50)
rollno.	Number (38)
ph no.	Number (38)

3. ALTER TABLE:- used to add, delete, or modify columns in existing table.

query:- After table teacher add admission date  
del table employer & rename to emplo  
- yes.

output:- Table altered (2).

4. Drop Table:- Delete entire table structure & all its data.

query:- drop table teacher;

Output:- Table dropped.

II DML commands:- used to manage & manip  
- ate data inside database  
table.

Insert Into:-

Inserts new rows into a table.

query:-

insert all into employee (emp id;  
emp name) value (101 swamy) into employees  
(emp id, emp name) value (102) pavan  
select from dual;

output:-

2 rows created.

2. UPDATE:-

Modifies existing data in a table.

query:- update employees set empname  
= pavan

Empid = 102.

Data out:- 1 row updated.

After update:-

Select from employees.

Output:-

Emp id	Empname
101	pavan
102	pavan kumar.

3. Select:- Recues data from one or more table  
→ select empname from employees;  
output:-

Empname:

pavan

pavan kumar.

4. Select with where clause:-

~~Determle specific rowds that satifly condition.~~

query:-

select\* from employer where empid=101;

empid	Empname
101	pavan

5. Delete:-

~~Delete one or more rows from table~~

~~Delete from employer where empid=101;~~

output: 1 row deleted

select : from employees;

Empid	Empname
102	pavan kumar

VEL TECH	
EX NO.	01
PERFORMANCE (5)	5
RESULT AND ANALYSIS (5)	5
VIVA VOCE (5)	0
RECORD (5)	-
TOTAL (20)	10
SIGN WITH DATE	(R)

13/8/15

### Result:

Thus; the task to implement DDL & DML command in relational database management system completed successfully.

19/8/25

## Task 2.2

Aim: To implement the data definition language & data manipulation language commands with constraints.

~~late submission~~ → primary key, foreign key, Not null, Unique, Check, DDL (Data Definition Language) → Create, Alter, Drop, Truncate, Rename.

DML (Data Manipulation Language) → Insert, Update, Delete, Select.

Constraints → Primary key, Foreign key, Not null, Unique, Check, Default.

(used to restrict column data or set of rules defined in oracle tables to ensure data integrity).

1. DDL Commands for Hospital Management System

1.1 Create Table

Create table patient (

Patientid int primary key,

Patientname varchar (50) Not null,

gender Char(1) Check (Gender IN ('M', 'F'))

Age int check (Age > 0),

ContactNumber Varchar (15) unique,

Address varchar (100)

);

Output:-

Column Name	Datatype	Constraints
Patient ID	INT	Primary key
Patient Name	VARCHAR	Not Null
gender	char(1)	check(Gender IN ('M', 'F'))
age	INT	check(Age > 0)
Patient Name	VARCHAR(15)	unique

CREATE TABLE Doctor(

DoctorId int primary key,  
DoctorName varchar(50) Not null,  
Specialization varchar(50),  
PhoneNumber varchar(15) unique

);

Table created

Output:

Column Name	datatype	Constraints
Patient ID	INT	primary key
PatientName	VARCHAR	Not null
gender	char(1)	check(gender in ('M', 'F'))
Age	INT	check(Age >= 0)

CREATE TABLE Appointment(

AppointmentId int Primary key,  
PatientId int not null,  
DoctorId int not null,  
AppointmentDate Date Default current\_date,  
Diagnosis varchar(200),  
Foreign key (PatientId) References Patient(Patient\_id),  
Foreign key (DoctorId) References Doctor(DoctorId)

);

Column Name	datatype	Constraints
Appointment ID	INT	Primary key
Patient ID	INT	Not null
Doctor ID	INT	Not null
Diagnosis	VARCHAR	not null

### 1.2 Alter Table:

Alter table Patient Add email varchar(50);

Alter table Patient Modify ContactNumber varchar(15);

### 1.3 Truncate Table:

Truncate table Appointment;

Result:- All rows removed from Appointment table, structure remains.

## 2. DML Commands for Hospital Management System

### 2.1 Insert Data

Insert into Patients (Patientid, Patientname, gen -er, age, contactnumber, Address, Email)  
Values (1, 'John Doe', 'M', 35, '9876543210', 'No  
Delhi', 'john@gmail.com');

Insert into Appointment (Appointmentid, Patientid, Doctorid, Appointment Date, Diagnosis)

Values (1001, 1, 101, '2025-08-15', 'Mild Chest Pain')

Output:-

Patient id	
Patient name	John Doe.
gender	M
Age	35
Contact number	9876543210

Output:- Records inserted successfully.

## 2.2 Update Data

### Update Patient

Set Age = 36, Address = 'Mumbai' chennai'

Where Patient id = 1;

Output:- John Doe's age updated to 36 & address changed to chennai

## 2.3 Delete Data

### Delete from Appointment

Where Appointmentid = 1001;

Output:- Appointment with id 1001 deleted.

VRL TECH	
EX NO.	32
PERFORMANCE (5)	2
RESULT AND ANALYSIS (5)	2
VIVA VOCE (5)	0
RECORD (5)	-
TOTAL (20)	10
STATION WITH DATE	Q1 19/8/2023

Result:-

Thus implementing DDL & DML commands with constraints for hospital management system completed successfully.