

Task 2.1: Generating design of commands often traditional Database model

Aim: To perform (DDL) data definition language
and com() Data Manipulation language command.

DDL Commands:

Create rename

Drop

Alter

Truncate

DML Commands:

Insert

Update

Delete

Select

DDL commands:

creating a table by using create commands

```
CREATE TABLE student (  
    stu-id int,  
    stu-name varchar(30),  
    stu-department varchar(10),  
    stu-gender varchar(5),  
    stu-ph.no int :);
```

Using ALTER command we can add or
remove the column.

SYNTAX :

AFTER Table student ADD column stu-dept

-id int ;

DROP : DROP command is used to drop the table completely
DROP TABLE student

TRUNCATE : TRUNCATE command is used to remove all data but keep structures
TRUNCATE TABLE

STUDENT.

TRUNCATE TABLE STUDENT

DML COMMANDS

INSERT : Insert command is used to insert the values to the table

INSERT INTO STUDENT VALUES

(28481, 'Jagamedham', 'CSE', 'male', '86808')

(29511, 'Krishna', 'CSE', 'male', 43278)

SELECT : Retrives data from one or more tables

SELECT * FROM Books ;

UPDATE : Radiation existing data in a table

sql.

UPDATE Books SET Price = 450.00 WHERE

Title = 1 wings of Fire ;

Output :

Book ID	Title	Author	Price
1.	The Alchemist	Paulo Coelho	2330
2.	Wings of fire	AD.J. Abdul Kalam	42000
3.	1984	George Orwell	1100

Output :

BOOK ID	THPe	Author	Price
1	The Alchemist	Paulo Coelho	35000
2.	wings of fire	AD.J. Abdul Kalam	43000
3.	1984	George Orwell	29100

Output :

BOOK ID	Title	Author	Price
2.	wings of fire	AD.J. Abdul Kalam	43000
3.	1984	George Orwell	29100

Output :

BOOK ID	Title	Author	Price
2.	1984	George Orwell	29100

Command type.	Command	Description
DDL	CREATE	Create Table
PDL	DESC	show table structure
DDL	DROP	Delete table
DDL	ALTER	Modify table structure
DML	INSERT	Add records to table
DML	SELECT	Retrives records
DML	UPDATE	Modifies existing records
DML	DELETE	Remove records

Output :

1 row updated.

Sql : SELECT * FROM Books

DELETE : DELETE FROM Books WHERE Book

30 = 1 ,

Output :

1 row deleted

Sql : SELECT * FROM Books ;

SELECT with WHERE clause

Retrives specific records that satisfy the condition

Sql : SELECT * FROM BOOKS WHERE Author
= George ors .

VEL TECH - CS	
EX NO.	22
PERFORMANCE (5)	5
RESULT AND ANALYSIS (5)	5
VIVA VOCE (5)	2
RECORD (5)	1
TOTAL (20)	12
SIGN WITH DATE	14/8/22

Result : The task to create , delete ,
add the table and DML commands
was executed successfully.

1-08-2025

Task 2.2 : DDL and DML Commands with Constraints

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 .

1. DDL Commands for hospital management system

1.1 CREATE TABLE

CREATE TABLE Patient (

Patient ID INT Primary key,

Patient Name VARCHAR (50) NOT NULL ,

Gender char (1) check (gender IN ('M', 'F')),

Age , INT check (Age > 0),

Contact Number VARCHAR (15) unique

Address VARCHAR (100),

);

CREATE TABLE Doctor (

DOCTOR ID INT Primary key,

doctor Name VARCHAR (50) NOT NULL ,

Specialization VARCHAR (50),

Phone number VARCHAR (15) unique

);



CREATE TABLE Appointment (

Appointment ID INT Primary Key,

Patient ID INT Primary Key,

Doctor INT NOT NULL,

Appointment date default

CURRENT - DATE

diagnosis VARCHAR (200),

Foreign key (Patient ID) References

Patient (Patient ID),

Foreign key (doctor ID) References

doctor (doctor ID)

);

1.2 ALTER TABLE:

ALTER TABLE Patient ADD Email VARCHAR (50);

ALTER TABLE Patient MODIFY Contact number
VARCHAR (20);

1.3 TRUNCATE TABLE

TRUNCATE TABLE Appointment;

Result: All rows removed from Appointment Table.

Structure remains.

1.4 RENAME TABLE

RENAME TABLE Patient To patients;

2. DML commands for hospital management system

2.1 INSERT DATA

INSERT INTO patients (Patient ID, Patient Name, gender, Age, Contact number, Address, Email)

VALUES (1, 'John Doe', 'M', 35, '9876543210', 'New delhi', 'John@gmail.com');

INSERT INTO doctor (doctor ID, doctor name, Specialization, phone number)

VALUES (101, 'Dr. Meera Sharma', 'Cardiologist', '9123456789');

INSERT INTO Appointment (Appointment ID, Patient ID, doctor ID, Appointment date, diagnosis)

VALUES (1001, 1101, '2025-08-15', 'Mild chest pain');

Result: Records inserted successfully.

2.2 UPDATE DATA

UPDATE patient

SET Age = 36, Address = 'Mumbai'.

WHERE Patient ID = 1;

Result: John Doe's age updated to 36 and address changed to Mumbai.

2.3 DELETE DATA

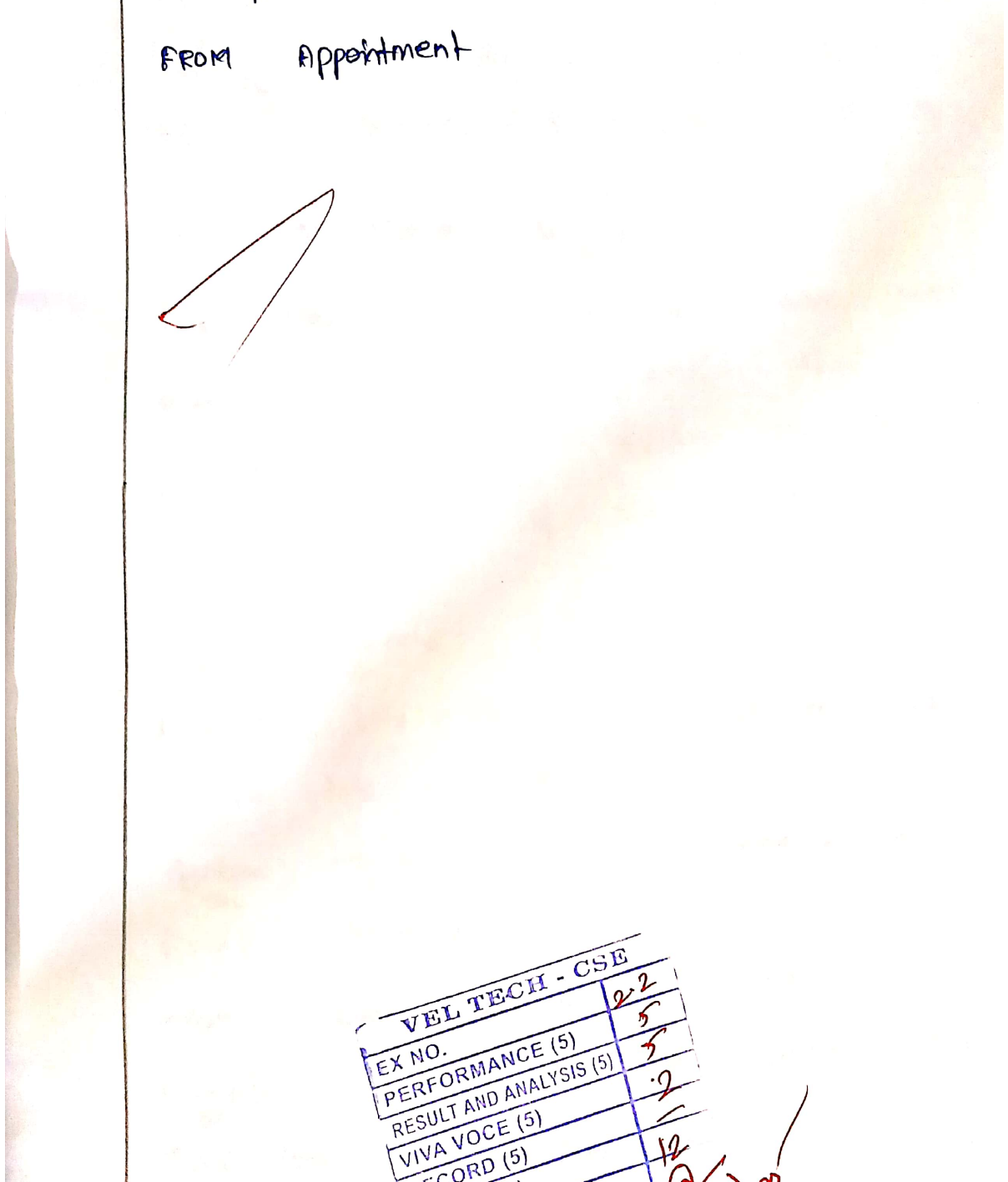
DELETE FROM Appointment

WHERE Appointment with 101001 deleted.

Result: Appointment with ID 1001 deleted.

2A SELECT DATA

SELECT p. patient Name , d. doctor Name ,
a. Appointment date , a . diagnosis
FROM Appointment



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EX NO.	22
PERFORMANCE (5)	5
RESULT AND ANALYSIS (5)	5
VIVA VOCE (5)	2
RECORD (5)	1
TOTAL (20)	12
SIGN WITH DATE	11/8/23

Result : All DDL and DML commands executed
successfully with constraints and ~~sample outputs~~
are executed successfully.