

Task-2.1

4/8/25

DDL & DML Commands

Generating Design of other traditional base

Aim: To perform (DDL) data definition language and (DML) data Manipulation Commands.

DDL Commands

- > Create
- > Drop
- > Alter
- > rename

DML Command

- > 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 (30),  
    stu-gender varchar (30),  
    stu-ph-no int ;
```

* Using ALTER command we can add or remove the column.

Syntax :

```
ALTER TABLE student - Add column stu-depart-d  
int ;
```

DROP

Drop Command is used to drop the table completely drop Table student.

TRUNCATE

- * Truncate Command is used to all data but keep structure.

Truncate Table student.

DML Commands

Insert

- * Insert Command is used to insert the values to the table

INSERT INTO STUDENT VALUES

(30628, 'Sanjay', 'CSE', 'MDE', 9682406)

(28800, 'sharvan', 'CSE', 'mde', 862431)

UPDATE

- * Update Command is used to update the existing records.

UPDATE student

SET stu-name = 'Sanjay'

where stu-id = 28800;

DELETE

- * Delete Command is used to operate the existing records.

~~update~~

Delete from student

where stu-id = 28800;

SELECT

- * select Command is used to retrieve the records from table

SELECT * from student

S.NO	stu-ID	stu-name	stu-dep artment	stu-gender	stu-ph-no
1	30688	Ram	CSE	male	988608

Ex:

CREATE TABLE STUDENTS (

Roll-no INT,

Name VARCHAR(30)

Age INT,

COURSE, VARCHAR(30)

ALTER TABLE students ADD

Email VARCHAR(50);

INSERT INTO students VALUES

(1, 'Sanjay', 19, 'B.Tech', 'sanjay@gmail.com')

(2, 'Roy', 21, 'B.Tech', 'roy@gmail.com')

(3, 'Arun', 20, 'B.Tech', 'arun@gmail.com')

UPDATE students

SET Email = vtu30688@gmail.com

where Roll-no = 1;

DELETE FROM STUDENTS

where Roll-no = 2;

SELECT * FROM STUDENTS

SNO	Roll-no	Name	Age	Course	E-mail
-----	---------	------	-----	--------	--------

1	1	Ram	19	B.Tech	Ram@gmail.com
---	---	-----	----	--------	---------------

2	3	Roy	20	B.Tech	roy@gmail.com
---	---	-----	----	--------	---------------


SELECT Name FROM students;

S.NO	Name
1	Ram
2	Roy

SELECT * FROM students
where name = "sanjay";

S.NO	Roll NO	Name	Age	Course	Email
1	1	Som	20	B-tech	sm@gmail.com

Result:- All the DDL and DML Commands are
in SQL are Successfully Executed

VEL TECH	
EX No.	2.1
PERFORMANCE (5)	5
RESULT AND ANALYSIS (5)	5
VIVA VOCE (5)	4
RECORD (5)	1
TOTAL (20)	14
SIGN WITH DATE	

Task 2.2

11/8/25

DDL and DML Commands

Aim: To perform DDL and DML Commands with constraints in SQL

Constraints

- NOT & NULL
- UNIQUE
- Primary key
- foreign key
- check
- default

It ensures a column cannot store Null values.

SYNTAX:

CREATE TABLE TABLE NAME

COLUMNNAME DATATYPE NOT NULL);

UNIQUE:

It ensure all values in a column are unique

SYNTAX:

CREATE TABLE tablename (

columnname datatype UNIQUE);

Primary key:

It is a Combination of NOTNULL and UNIQUE

FOREIGN KEY

It ensures values in one table match values in another table

SYNTAX

FOREIGN KEY (column name) REFERENCE
another table name (column name)

DEFAULT

= It provides a default value for a column when name is specified

Example

CREATE TABLE DEPARTMENT

DEPT-ID INT PRIMARY KEY

DEPT-NAME VARCHAR(20) UNIQUE NOT NULL;

CREATE TABLE STUDENT (

STU-ID INT PRIMARY KEY,

STU-NAME VARCHAR(10) NOT NULL,

STU-DEPARTMENT INT DEFAULT 101,

STU-GENDER VARCHAR(6)

CHECK (STU-GENDER IN (MALE,
FEMALE))

STU-PHNO BIGINT UNIQUE,

FOREIGN KEY (STU-DEPARTMENT) REFERENCE

DEPARTMENT (DEPT-ID);

INSERT INTO DEPARTMENT VALUES

(101, 'CSE')

(102, 'ECE');

(103, 'IT');

SELECT FROM STUDENT → BEFORE PERFORMING
ALTER command

	STU-ID	STU-Name	STU-DEPARTMENT	STU-GENDER	STU-PHNO
1	1	RAVI	CSE	MALE	987654321
2	2	KIRAN	ECE	FEMALE	98765432

SELECT * FROM DEPARTMENT - BEFORE PERFORMING
ALTER COMMAND

	STU-ID	
1	101	CSE
2	102	ECE
3	103	IT

SELECT * FROM STUDENT -- after PRIMARY KEY that

S.NO	STU ID	STU NAME	STU DEPARTMENT	STU Ph no	STU Email
1	1	Chandu	102	Male	NULL
2	2	Nishile	103	Female	NULL

select * FROM STUDENT -- after performing delete
Command

S.NO	STU-ID	STU-Name	STU DEPARTMENT	STU Gender	STU Email
1	1	chandu	102	Male	NULL

INSERT INTO STUDENT VALUES

(1, 'RAVI', 102, 'MALE', 987654110),

(2, 'ANITA', 'FEMALE', 9876543210);

SELECT " FROM DEPARTMENT;

SELECT " FROM STUDENT;

ALTER TABLE STUDENT;

ADD STU-EMAIL VARCHAR(50) DEFAULT

'veltech@gmail.com';

STU-ID	STU-NAME	STU-DEPARTMENT	STU-GENDER	STU-P HNO	STU- EMAIL
1	RAVI	102	MALE	9241321054	NULL
2	ANITA	101	FEMALE	9876543210	NULL

UPDATE STUDENT

SET STU-DEPARTMENT = 101

WHERE STU-NAME = 'ANITA'

DELETE FROM DEPARTMENT

WHERE DEPT-ID = 103;

INSERT INTO STUDENT VALUES

(2, 'ANITA', 'FEMALE', 93876543210);

(7, 'shrestha', 'Female', 9876543210);

SELECT * FROM STUDENTS - AFTER inserting values

	STU-NAME	STU DEPAR	STU- GENDER	STU-phno	STU-GMAIL
1	RAVJ	102	MALE	9876543210	NULL
2	ANITA	101	FEMALE	9876501234	veltech @gmail
3	Shresa	101	FEMALE	9398728053	veltech @gmail

SELECT * FROM DEPARTMENT: --After inserting values

	DeptID	Dept Name
1	101	CSE
2	102	ECE
3	103	IT

DROP TABLE DEPARTMENT;

--- Error ---

could not drop object 'DEPARTMENT' because
Ctps referenced by a FOREIGN KEY CONSTRAINT

To solve this first we have to drop
student table to drop DEPARTMENT TABLE.

Result: All the DDL and DML commands
are with Constraints are performed
and executed successfully

VEL TECH - CSE	
LY NO.	
PERFORMANCE (5)	202
RESULT AND ANALYSIS (5)	5
VIVA VOCE (5)	5
CORD (5)	3
(20)	15