

4/8/25 -

## TASK-2. DDL and DML commands

Aims:- To perform (DDL) data definition language and (DML) data manipulation language.

### DDL Commands

- Create → Rename.
- Drop
- Alter
- Truncate.

### DML Commands

- Insert
- update
- delete
- select

### DDL Commands

#### CREATE

- \* creating a table by using create command

CREATE Table Students (

stu-id int,  
stu-name varchar(100),  
stu-department varchar(100),  
stu-ph-no int.);

- \* using ALTER command we can add or remove the column

SYNTAX:-

ALTER table Student ADD column  
stu-depart-id int;

## DROP

- \* Drop command is used to drop the table.
- Completes drop table student.

## TRUNCATE

- \* Truncate command is used to remove 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, 'Omkar', 'CS', 'Mumbai', '862800')

### UPDATE

- \* UPDATE command is used to update the existing records.

UPDATE student

set stu-name = 'nekoj'

### DELETE

- \* Delete command is used to delete a record.
- Delete from student,

where stu-id = 28800;

### SELECT

- \* select command is used to retrieve the record from table



SELECT \* FROM STUDENT

| SO | STU-ID | STU-NAME | STU-department | STU-gender | STU-ph-no |
|----|--------|----------|----------------|------------|-----------|
| 1  | 28806  | Omkan    | CSC            | Male       | 8688056   |

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, Omkan, 19, (B.Tech), (Omkan@gmail.com));

(2, Roy, 20, (B.Tech), (apple@gmail.com));

(3, (Joy), 21, (B.Tech), (joy@gmail.com));

UPDATE STUDENTS

SET Email = vt028806@gmail.com

WHERE Roll-no = 1;

DELETE FROM STUDENTS

WHERE Roll-no = 2;

SELECT \* FROM STUDENT;

| S.NO | Roll NO | Name  | Age | course | Email              |
|------|---------|-------|-----|--------|--------------------|
| 1    | 1       | Omkan | 19  | B.Tech | vt028806@gmail.com |
| 2    | 3       | Joy   | 21  | B.Tech | Joy@gmail.com      |

SELECT \* FROM students;

WHERE Name = (omkar);

| S.NO | Roll.no | Name  | Age | Course | Email          |
|------|---------|-------|-----|--------|----------------|
| 1    | 1       | omkar | 10  | B.Tech | utuz8806@gmail |

|                 |         |
|-----------------|---------|
| EXN:            | 2.1     |
| PER:            | 5       |
| RES:            | 3       |
| VIN:            | 1       |
| RECU:           | 11      |
| TOT:            | 11      |
| SIGN WITH DATE: | 27/8/20 |

Result:- All the DDL and DML commands are in sql are successfully executed.



11/8/25

## TASK (2.2)

DDL and DML Commands with constraints.

Aim:- To perform DDL and DML commands with constraints in SQL.

### Constraints:-

→ NOT NULL.

→ UNIQUE

→ PRIMARY KEY

→ FOREIGN KEY

→ CHECK

→ DEFAULT

### NOT NULL

It ensures a column cannot store NULL values.

### Syntax

CREATE TABLE TABLE-NAME (columnname  
Data type NOT NULL);

### Unique

It ensures all values in a column are unique.

### Syntax:-

Create table table name (

column name datatype unique);

### FOREIGN KEY:-

It ensure values in one table match values in another table.

### SYNTAX:-

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

### DEFAULT;

It provides a default value for a column when none is specified.

### Example:-

```
CREATE TABLE DEPARTMENT  
DEPT-ID INT PRIMARY KEY,  
DEPT-NAME VARCHAR(20) unique
```

```
CREATE TABLE STUDENT (  
STU-ID INT PRIMARY KEY,  
STU-NAME VARCHAR(30) NOT NULL,  
STU-DEPARTMENT INT DEFAULT(1))
```

```
INSERT INTO DEPARTMENT VALUES  
(101, 'CSE'),  
(102, 'ECE'),  
(103, 'ITI');
```



SELECT \* FROM STUDENT - Before performing ALTER command.

| STU-ID | STU-NAME | STU-DEPARTMENT | STU-SEX |
|--------|----------|----------------|---------|
| 1      | RAVI     | 101            | MALE    |
| 2      | ANITA    | 101            | FEMALE  |

SELECT \* FROM DEPARTMENT - Before performing ALTER command.

| Sr. ID | DEPT. ID | DEPT. NAME |
|--------|----------|------------|
| 1      | 101      | CSE        |
| 2      | 102      | ECE        |
| 3      | 103      | IT         |

SELECT \* FROM STUDENT - After performing update command.

| STU-ID | STU-NAME | STU-DEPARTMENT | STU-SEX | STU-PH    |
|--------|----------|----------------|---------|-----------|
| 1      | RAVI     | 102            | MALE    | 987654321 |
| 2      | ANITA    | 103            | FEMALE  | 987654321 |

INSERT

SEL  
SEL

ALT

ADD

(V)

STU

UPDATE

SET

WHERE

DEL

WH

9

INSERT INTO STUDENT VALUES

(1, 'RAVI', 102, 'MALE', 9876543210);

(2, 'ANITA', 'FEMALE', 987654321);

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-EMAIL | STU-DOB    |
|---|--------|----------|----------------|-----------|------------|
| 1 | 1      | RAVI     | 102            | MALE      | 9876543210 |
| 2 | 2      | ANITA    | 103            | FEMALE    | 987654321  |

UPDATE STUDENT

SET STU-DEPARTMENT = 103

WHERE STU-NAME = 'ANITA'

~~DELETE FROM DEPARTMENT~~

~~WHERE STU-NAME = 'ANITA'~~

INSERT INTO STUDENT VALUES

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

(1, 'shreya', 'FEMALE', 9876543210);



DROP TABLE DEPARTMENT;

--- Error ---

could not drop object (DEPARTMENT) because  
it is referenced by a FOREIGN KEY  
constraint.

~

To solve this first we have to drop  
student table after we have to drop  
Department table.

| VEL TECH                |    |
|-------------------------|----|
| CV No.                  | 3  |
| ORMANCE (5)             | 5  |
| RESULT AND ANALYSIS (5) | 5  |
| VIVA VOCE (5)           | 1  |
| RECORD (5)              |    |
| TOTAL (20)              | 11 |
| SIGN WITH DATE          |    |

Result:- All the DDL and DML commands are  
with constraints are performed and executed  
successfully.