

Task 2.2

18/25

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 values a column cannot store null

Syntax:

```
CREATE TABLE TABLE NAME(  
    COLUMNNAME DATATYPE NOT NULL);
```

UNIQUE:

It ensure all values in a column are unique.

Syntax

```
CREATE TABLE table name (  
    columnname datatype UNIQUE);
```

Primary Key:

It is a combination of NOTNULL and UNIQUE.

SELECT * FROM STUDENT → Before performing ALTER Command

S.NO.	STU NAME	STU DEPARTMENT	STU Gender	STU Ph No.
1	Chandu	102	Male	9349463789
2	Nishika	101	Female	9324463789

SELECT * FROM DEPARTMENT - BEFORE Performing ALTER Command.

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

SELECT * FROM STUDENT - After Performing update Command.

S.NO.	STU-ID	STU NAME	STU Department	STU Gender	STU Ph No.	STU Email
1	1	Chandu	102	Male	9349463789	abc@gmail.com
2	2	Nishika	103	Female	9324463789	Null

Select * From student -- after performing delete Command.

S.NO.	STU-ID	STU NAME	STU DEPARTMENT	STU Gender	STU Ph	STU Email
1	1	Chandu	102	Male	9302436400	Null

FOREIGN KEY

It ensures values in one table match values in another table

Syntax.

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

Default:

It provides a default value for a column when no value 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(20) UNIQUE NOT NULL

STU-DEPARTMENT INT DEFAULT 0,
STU-GENDER VARCHAR(10)

CHECK(STU-GENDER)

"M" MALE, "F" FEMALE

STD-PHND BIGINT UNIQUE

FOREIGN KEY (STU-DEPARTMENT)

References,

DEPARTMENT (DEPT-ID)

① SELECT * FROM STUDENT --- After Values

SLNO	STU NO	STU NAME	STU DEPARTMENT	STU GENDER	STU	STU EMAIL
1	1	Chandu	108	Male		
2	2	Nishika	109	Female		
3	3	Harshi	101	Female		

SELECT * FROM DEPARTMENT --- After Inserting values

SLNO	DEPT ID	DEPT NAME
1	101	ESE
2	102	ECE
3	103	IT.

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

INSERT : NO STUDENT VALUES

(1) Chandu, 102, 'MALE', 9392436400
(2) Nishila, Female, 9392436403

SELECT * FROM

SELECT * FROM DEPARTMENT;

FROM STUDENT;

Drop Table Department;
--- Error.

Could not drop object "DEPARTMENT"
Because it is referenced by a foreign
key constraint

To solve this first the have to
drop Student table after the have
to drop Department table

MARKSHEET - CSE	
EX NO.	5
PERFORMANCE (5)	5
RESULT AND ANALYSIS (5)	3
VIVA VOCE (5)	—
RECORD (5)	13
TOTAL (2)	14
GRADE	A

Result: all the DDL and DML commands
are with constraints are formed and
executed successfully.

sure with constraints are formed and
executed successfully.